

**Memphis**

**and**

**Shelby County**

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**2012 Joint Plumbing Code**

## **Replace Existing Chapter One with the Following**

### **Section 101- General**

**101.1 Title.** – These regulation together with the 2009 Edition of the International Code Council Plumbing Code shall be known as the 2012 Memphis and Shelby County Plumbing Code, part of the 2012 Technical Code for Memphis and Shelby County, hereinafter referred to as “this code.

**101.2 Scope.** - The provisions of this code shall apply to and regulate the erection, installation, alteration, repairs, relocation, replacement, addition to, use or maintenance of plumbing systems. This code shall also regulate non-flammable medical gas, inhalation anesthetic, vacuum piping, nonmedical oxygen systems and sanitary and condensate vacuum collection systems. The installation of fuel gas distribution piping and equipment, fuel gas water heaters and water heater venting systems shall be regulated by *the International Fuel Gas Code*. Provisions in the appendices shall not apply unless specifically adopted.

**Exceptions:** Plumbing systems in existing buildings undergoing repair, alteration, or addition, and changes of occupancy shall be permitted to comply with the *International Existing Building Code*.

**101.2.1 Appendices.** – Provisions in the appendices shall not apply unless specifically adopted, and the provision in the following Appendices shall apply:

**Appendix A.** - Plumbing Permit and Inspection Fee Schedule

**Appendix B.** - Rates of Rainfall for Various Cities

**Appendix C.** – Gray Water Recycling Systems

**Appendix D.** - Degree Day and Design Temperature

**Appendix E.** - Sizing of Water Piping Systems

**Appendix F.** - Structural Safety

**Appendix H.** - Cross Connection, Backflow, Back Siphonage

**101.3 Intent.** - The purpose of this code is to establish and provide minimum standards and requirements to safeguard life or limb, health, property and public welfare by regulating and controlling the design, construction, installation, quality of materials, location, operation and maintenance or use of plumbing equipment and systems.

**101.3.1 Quality Control.** - Quality Control of materials and workmanship is not within the purview of the Technical Codes except as it relates to the purpose stated herein.

**101.4 Severability.** - If any section, subsection, sentence, clause or phrase of this code is, for any reason, held to be unconstitutional, illegal or void,,

such decision shall not affect the validity of the remaining portions of this code.

### **Section 102 – Applicability**

**102.1 General.** - The provisions of this code shall apply to all matters affecting or relating to structures and premises, as set forth in Section 101. Where, in a specific case, different sections of this code specify different materials, methods of construction or other requirements, the most restrictive shall govern. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable.

**102.1.1 Plumbing.** – The provisions of the *International Plumbing Code* shall apply to every plumbing installation, including alterations, repairs, replacement, equipment, appliances, fixtures, fitting and appurtenances and connections to the water or sewage system.

**102.1.2 Federal And State Authority.** – The provisions of the Technical Codes shall not be held to deprive any Federal or State agency, or any applicable governing authority having jurisdiction, or any power or authority which it had on the effective date of the adoption of the Technical Codes or of any remedy then existing for the enforcement of its orders, nor shall it deprive any individual or corporation of its legal rights as provided by law.

**102.2 Existing Installations.** - Plumbing systems lawfully in existence at the time of the adoption of this code shall be permitted to have their use and maintenance continued if the use, maintenance or repair is in accordance with the original design and no hazard to life, health or property is created by such plumbing system.

**102.3 Maintenance.** - All plumbing systems, materials and appurtenances, both existing and new, and parts thereof, shall be maintained in proper operating condition in accordance with the original design and in a safe, hazard free and sanitary condition. Devices or safeguards which are required by this code shall be maintained in compliance with the code edition under which they were installed. The owner or the owner's designated agent shall be responsible for maintenance of plumbing systems. To determine compliance with this provision, the Building Official shall have the authority to require any plumbing system to be re-inspected.

Maintenance requiring a permit shall be performed by a registered or licensed contractor.

**[EB] 102.4 Additions, Alterations Or Repairs.** - Additions, alterations, renovations or repairs to any

plumbing system shall conform to that required for a new plumbing system without requiring the existing plumbing system to comply with all of the requirements of this code. Additions, alterations or repairs shall not cause an existing system to become unsafe, unsanitary or overloaded.

Minor additions, alterations, renovations and repairs to existing plumbing systems shall be permitted in the same manner and arrangement as was in the existing system, provided such repairs or replacements are not hazardous and are approved.

**[EB] 102.5 Change In Occupancy.** - It shall be unlawful to make a change in the occupancy of any structure which will subject the structure to any special provision of this code without approval of the Building Official. The Building Official shall certify that such structure meets the intent of the provisions of law governing building construction for the proposed new occupancy and that such change of occupancy does not result in any hazard to the public health, safety or welfare.

**[EB] 102.6 Historic Buildings.** - The provisions of this code relating to the construction, alteration, repair, enlargement, restoration, relocation or moving of buildings or structures shall not be mandatory for existing buildings or structures identified and classified by the state or local jurisdiction as historic buildings when such buildings or structures are judged by the Building Official to be safe and in the public interest of health, safety and welfare regarding any proposed construction, alteration, repair, enlargement, restoration, relocation or moving of buildings.

**102.7 Moved Buildings.** - Except as determined by Section 102.2, plumbing systems that are a part of buildings or structures moved into or within the jurisdiction shall comply with the provisions of this code for new installations.

**102.8 Referenced Codes And Standards.** - The codes and standards referenced herein shall be those that are listed in Chapter 13 and such codes and standards shall be considered as part of the requirements of this code to the prescribed extent of each such reference. Where differences occur between provisions of this code and the referenced standards, the provisions of this code shall be the minimum requirements.

**102.9 Requirements Not Covered By This Code.** - Any requirements necessary for the strength, stability or proper operation of an existing or proposed plumbing system, or for the public safety, health and general welfare, not specifically covered by this code, shall be determined by the Building Official.

**102.10 Other Laws.** - The provisions of this code shall not be deemed to nullify any provisions of local, state or federal law.

**102.11 Application Of References.** - References to chapter or section number, or to provisions not specifically identified by number, shall be construed to refer to such chapters, sections, or provisions of this code.

### ***SECTION 103 - Memphis and Shelby County Office of Construction Code Enforcement (MSCCCE)***

**103.1 Creation of Enforcement Agency.** - Joint Resolution /Ordinance #3333 was adopted and approved by the City of Memphis and the Shelby County legislative bodies, to create the Memphis and Shelby County Office of Construction Code Enforcement (MSOCCE). This is a joint agency charged with enforcement of the Memphis and Shelby County Building Code, (including the Existing Building Code, Residential and Energy Conservation Code referenced therein), the Memphis and Shelby County Mechanical Code, the Memphis and Shelby County Fuel Gas Code, the Memphis and Shelby County Plumbing Code and this Code, which are to be known as the Memphis and Shelby County 2011 Technical Codes.

#### **103.2 Employee Qualifications**

**103.2.1 Building Official Qualifications And Appointment.** - As established by Ordinance 3333.

**103.2.2 Chief Inspector Qualification.** - The Building Official, with the approval of the Administrator, may designate chief inspectors to administer the provisions of the Memphis and Shelby County 2011 Technical Codes. The qualifications of the Chief Inspectors shall be as established by Ordinance #3333.

**103.2.3. - Inspector Qualifications.** - The Building Official, with the approval of the Administrator, may hire such numbers of officers, inspectors, assistants, and other employees as shall be authorized from time to time. For employee minimum qualifications, see the Shelby County Administration Job Class Master Listing

**103.2.4. - Deputy Building Official Qualifications.** - In accordance with the prescribed procedures of this jurisdiction, and with the concurrence of the appointing authority the Building Official may designate as his deputy an employee in the department who shall, during the absence or disability of the Building Official, exercise all the powers of the Building Official. The Deputy Building Official should have the same qualifications listed in 103.2.2.

**103.3 Restriction On Employees.** - An officer or employee connected with the department, except one whose only connection is as a member of one or more of the Boards established by the Technical Codes, shall not be financially interested in the

furnishing of labor, material or appliances for the construction, alteration, or maintenance of a building, structure, service, system or in the making of plans or of specifications thereof, unless he is the owner of such. This officer or employee shall not engage in any other work, which is inconsistent with the duties or conflicts, or may appear to conflict, with the interest of the department.

**103.4 Records.** – The Building Official shall keep, or cause to be kept, a record of the business of the department. The records of the department shall be open to public inspection.

**103.5 Liability.** – Any officer or employee, or member of the Joint Board of Appeals or Plumbing Code Board, charged with the enforcement of the Technical Codes, acting for the applicable governing authority in the discharge of his duties, shall not thereby render himself personally liable, and is hereby relieved from all personal liability, for any damage that may accrue to persons or property as a result of any act required or permitted in the discharge of his duties. Any suit brought against any officer or employee or member because of such act performed by him in the enforcement of any provision of the Technical Codes shall be defended by the legal representative of the jurisdiction until the final termination of the proceedings.

## **SECTION 104 - Powers and Duties of the Building Official**

**104.1 General.** – The Building Official shall enforce all of the provisions of this code and shall act on any question relative to the installation, alteration, repair, maintenance or operation of all plumbing systems, devices and equipment except as otherwise specifically provided for by statutory requirements. The Building Official shall have the authority to render interpretations of this code, and to adopt policies, procedures, rules and regulations in order to clarify the application of its provisions. Such interpretations, policy procedures rules and regulations shall be in compliance with the intent and purpose of this code. Such policies and procedures shall not have the effect of waiving requirements specifically provided for in this code.

### **104.2 Right of Entry**

**104.2.1 Authorization.** - Whenever necessary to make an inspection to enforce any of the provisions of the Technical Codes, or whenever the Building Official has reasonable cause to believe that there exists in any building or upon any premises any condition or code violation which makes such building, structure, premises, electrical, gas, mechanical, or plumbing system unsafe, dangerous or hazardous, the Building Official may enter such building, structure, or premises at all reasonable

times to inspect the same or to perform any duty imposed upon the Building Official by the Technical Codes. If such building or premises are occupied, he shall first present proper credentials and request entry. If such building, structure, or premises are unoccupied, he shall first make a reasonable effort to locate the owner or other persons having charge or control of such and request entry. If entry is refused, the Building Official shall have recourse to every remedy provided by law to secure entry.

**104.2.2 Inspection With Warrant** - When the Building Official shall have first obtained a proper inspection warrant or other remedy provided by law to secure entry, no owner or occupant or any other persons having charge, care or control of any building, structure, or premises shall fail or neglect, after proper request is made as herein provided, to promptly permit entry therein by the Building Official for the purpose of inspection and examination pursuant to the Technical Codes.

**104.2.3 Identification.** – The Building Official and all his designees shall carry proper identification when inspecting structures or premises in the performance of duties under this code.

**104.3 Stop Work Order** – Upon notice from the Building Official, work on any building, structure, electrical, gas, mechanical or plumbing system that is being done contrary to the provisions of the Technical Codes or is a dangerous or unsafe manner, shall immediately cease. Such notice shall be in writing and shall be given to the owner of the property, or his agent, or to the person doing the work. The notice shall state the conditions under which the work may be resumed. When an emergency exists, the Building Official shall not be required to give a written notice prior to stopping the work and all construction work at that location shall cease.

### **104.4 Revocation Of Permits**

**104.4.1 Misrepresentation Of Application.** - The Building Official may revoke a permit or approval, issued under the provisions of the Technical Codes, in case there has been any false statement or misrepresentation as to the material fact in the application or plans on which the permit or approval was based.

**104.4.2 Violation Of Code Provisions** – The Building Official may revoke a permit upon determination by the Building Official that the construction, erection, alteration, repair, moving, demolition, installation, or replacement of the building, structure, electrical, gas, mechanical or plumbing system for which a permit was issued is in violation of, or not in conformity with, the provisions of the Technical Codes or any other local ordinance and or applicable law or regulation.

**104.5 Unsafe Building Or Systems** – All buildings, structures, electrical, gas, mechanical or plumbing systems which are unsafe, unsanitary, or do not provide adequate egress, or which constitute a fire hazard, or are otherwise dangerous to human life, or which in relation to existing use, constitute a hazard to safety or health, are considered unsafe buildings or service system. All such unsafe buildings, structures or service systems are hereby declared illegal and shall be abated by repair and rehabilitation or by demolition.

**104.6 Requirements Not Covered By The Code** – Any requirements necessary for the strength, stability or proper operation of an existing or proposed building, structure, electrical, gas, mechanical or plumbing system, or for the public safety, health and general welfare, not specifically covered by this or the other Technical Codes, shall be determined by the Building Official. This authority shall include the ability to issue written interpretations of code requirements which are not clearly addressed by other provisions of the technical codes.

## **SECTION 105 – APPROVAL**

**105.1 Modifications.** - Whenever there are practical difficulties involved in carrying out the provisions of this code, the Building Official shall have the authority to grant modifications for individual cases, provided the Building Official shall first find that special individual reason makes the strict letter of this code impractical and the modification is in compliance with the intent and purpose of this code and does not lessen health, life and fire safety requirements. The details of action granting modifications shall be recorded and entered in the files of the plumbing inspection department.

**105.2 Alternative Materials, Methods, Equipment And Appliances.** - The provisions of this code are not intended to prevent the installation of any material or to prohibit any method of construction not specifically prescribed by this code, provided that any such alternative has been approved. An alternative material or method of construction shall be approved where the Building Official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance durability and safety. The Building Official shall require that sufficient evidence or proof be submitted to substantiate any claim regarding the alternative.

**105.3 Required Testing.** - Whenever there is insufficient evidence of compliance with the provisions of this code, or evidence that a material or

method does not conform to the requirements of this code, or in order to substantiate claims for alternative materials or methods, the Building Official shall have the authority to require tests as evidence of compliance to be made at no expense to the jurisdiction.

**105.3.1 Test Methods.** - Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized and accepted test methods, the Building Official shall approve the testing procedures.

**105.3.2 Testing Agency.** - All tests shall be performed by an approved agency.

**105.3.3 Test Reports.** - Reports of tests shall be retained by the Building Official for the period required for retention of public records.

**105.4 Alternative Engineering Design.** – The design, documentation inspection testing and approval of an alternative engineering design plumbing system shall comply with sections 105.4.1 through 105.4.6.

**105.4.1 Design Criteria.** – An alternative engineering design shall conform to the intent of the provisions of this code and shall provide an equivalent level of quality, strength, effectiveness, fire resistance, durability, and safety. Material equipment or components shall be designed and installed in accordance with the manufacturer's installation instructions.

**105.4.2 Submittal.** – The registered design professional shall indicate on the permit application that the plumbing system is an alternative engineering design. The permit and permanent permit records shall indicate that an alternative engineered design was part of the approved installation.

**105.4.3 Technical Data.** - The registered design professional shall submit sufficient technical data to substantiate the proposed alternative engineering design and to prove that the performance meets the intent of this code.

**105.4.4 Construction Documents.** – The registered design professional shall submit to the Building Official two complete sets of signed and sealed construction documents for the alternative engineered design. The construction documents shall include floor plans and riser diagrams of the work. Where appropriate, the construction documents shall indicate the direction of flow, all pipe sizes, grade of horizontal piping, loading, and location of fixtures and appliances.

**105.4.5 Design Approval.** - Where the Building Official determines that the alternative engineered design conforms to the intent of this code, the plumbing system shall be approved. If the alternative engineered design is not approved, the Building Official shall notify the registered design professional in writing, stating the reason thereof.

**105.4.6 Inspection And Testing.** - The alternative engineered design shall be tested and inspected in accordance with the requirements of Section 107 and 312.

**105.5 Materials And Equipment Reuse.** -

Materials, equipment and devices shall not be reused unless such elements have been reconditioned, tested and placed in good and proper working condition and approved.

**Section 106 – Permits**

**106.1 Permits Required**

**106.1.1 When Required.** - Any owner, authorized agent, or contractor who desires to construct, enlarge, alter, repair, move, demolish or change the occupancy of a building or structure, or to erect, install, enlarge, alter, repair, remove, convert, or replace any electrical, gas, mechanical, or plumbing system or to cause any such work to be done shall first hire or cause to be hired a licensed and/or registered Contractor. Contractor shall first make application to Building Official and obtain the required permit for the work. Building permits may be issued to the property and building owner when so allowed by the Memphis and Shelby County Technical Codes and the State of Tennessee Contractors' License Laws.

**Exception** – Where plumbing or repairs must be performed in an emergency situation, the permit application shall be submitted within the next working business day to the department of plumbing inspection.

**106.1.2 Permit Required For Appurtenances To Buildings And Other Structures And Apparatus –**

A permit shall be required to erect, install, alter, or repair any of the following list of building appurtenances, new structures, and apparatus, and shall include, but not be limited to, the following:

1. Conveyor systems (Permit and Inspection Fees are as set for in section B-9 of the fee ordinance as set forth in Appendix A);
2. Racking systems/Shelving (Permit and Inspection Fees are as set for in section B-9 of the fee ordinance as set forth in Appendix A);
3. Process Piping System (Permit and Inspection Fees for Process Piping System will be as set forth in the fee ordinance as set forth in Appendix A)

**106.1.3 Permits For Specific Structures** – A permit, and the payment of the appropriate fees, shall be required to erect, install, alter, or repair any of the following list of building appurtenances, new structures and apparatus, and shall include, but not be limited to, the following:

**Mechanical Code /Electric Code /Plumbing Code**

1. Air Conditioning, heating, mechanical ventilating, blower, or exhaust systems

2. Cooling towers
3. Fire Protection, sprinkler systems
4. Mechanical refrigeration systems

**Building Code/Electric Code/Plumbing Code**

1. Special events permit (See policy and procedures for requirements.)

2. Temporary construction trailers
3. Elevators

**Building Code/ Electric Code/ Mechanical Code**

1. Generators; except outdoor self contained units (no MC)

2. Incinerator
3. Spray Booth

**Building Code /Mechanical Code/Plumbing Code**

1. Storage tank or bin

**Building Code/Electric Code**

1. Fire Alarms

**Mechanical Code/Electric Code**

1. Fire suppression systems, including commercial kitchen hoods

**Fuel Gas Code/Electric Code**

1. Liquefied petroleum gas systems

**Mechanical Code**

1. Medical gas systems

**Plumbing Code**

1. All potable water systems
  2. Sewer private (Private Drive); (See policy and procedures for requirements.)
  3. All sanitary and indirect waste piping.
  4. All private storm water piping.
  5. Any special piping connecting to the plumbing system(s)
  6. Backflow preventers for fire protection systems as per other sections of the plumbing code.
- Permit and inspection fees for the above list shall be as set forth in the approved Local Fee ordinance as appropriate.

**106.1.4 Temporary Structures.** – A special building permit issued for a limited time shall be obtained for the erection of temporary structures such as construction sheds, seats, canopies, tents and fences used in construction work or for temporary purposes such as reviewing stands. Such structures shall be completely removed upon the expiration of the time limit stated in the permit.

**106.1.5 Work Authorized.** – A plumbing permit shall carry with it the right to construct or install the work and fixtures identified in the permit, provided the same is shown on the drawings and set forth in the specifications filed with the application for the permit. When additional work is conducted which is not shown on the drawings or covered by the specifications submitted with the application, additional permits or a permit amendment to include such items or work shall be required.

**106.2 Exempt Work.** – The following work shall be exempt from the requirements of a permit:

1. The stopping of leaks in drains, water, soil, waste or vent pipes provided, however, that if any concealed trap, drainpipe, water, soil, waste or vent pipe becomes defective and it becomes necessary to remove and replace the same with new material, such work shall be considered as new work and a permit shall be obtained and inspection made as provided in this code.
2. The clearing of stoppages or the repair of leaks in pipes, valves, or fixtures, provided such repairs do not involve or require the replacement, rearrangement or the removal of any cover plate(s) or access ways of valves, pipes or fixtures.
3. All Licensed or Certified State Contractors who contract directly with the Memphis Light Gas and Water Division shall comply with the provisions of the Technical Codes, in that they shall be licensed or registered in the appropriate area to install work in the City of Memphis and County of Shelby, Tennessee. Further the contractor shall obtain permits for the work to be installed under the contract with the Memphis Light Gas and Water Division and the contractor shall pay a permit fee as established in the fee ordinance.

Exemptions from permit requirements of this code shall not be deemed to grant authorization for any work to be done in violation of the provisions of this code or any other laws or ordinances of this jurisdiction.

**106.3 Application For Permit.** - Each application for a permit, with the required fee, shall be filed with the Building Official on a form furnished for that purpose and shall contain a general description of the proposed work and its location. The application shall be signed by the owner or an authorized agent. The permit application shall indicate the proposed occupancy of all parts of the building and of that portion of the site or lot, if any, not covered by the building or structure and shall contain such other information required by the Building Official.

**106.3.1 Plumbing Permit Application.** - Each plumbing permit application shall be signed by the contractor, or an authorized agent with power of attorney. Power of Attorney shall be limited to two authorized agents only. The permit application shall describe the scope of work and contain such other information as may be required by the Building Official.

**106.3.1.1 Authorized Agents.** - Contractors wishing to establish authorized agents for the purpose of signing permit applications shall provide to the Office of Construction Code Enforcement, a letter of Limited Power of Attorney. The letter, submitted on Company Stationary shall contain the following:

1. Name and signature of the Owner

2. Location of the business

3. Name of the Company

4. Name and phone number of employees to act on behalf of said company

6. The owner's signature on the letter shall be notarized.

7. This letter will be resubmitted with each license renewal and contain any updated information that is now applicable. and every 6 months thereafter The plumbing department shall be notified immediately in writing of any change of status of the authorized agent(s).

The permit application shall describe the scope of work and contain such other information as may be required by the Building Official.

**106.3.2 Construction Documents.** - Construction documents, engineering calculations, diagrams and other data shall be submitted in four sets with each application for a permit. The Building Official shall require construction documents, computations and specifications to be prepared and designed by a registered design professional when required by state law. Construction documents shall be drawn to scale and shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that the work conforms to the provisions of this code. Construction documents for buildings more than two stories in height shall indicate where penetrations will be made for mechanical systems, and the materials and methods for maintaining required structural safety, fire-resistance rating and fireblocking.

**Exception:** The Building Official shall have the authority to waive the submission of construction documents, calculations or other data if the nature of the work applied for is such that reviewing of construction documents is not necessary to determine compliance with this code.

**106.3.3 Design Professional.** – The design professional shall be an architect or engineer legally registered under the laws of this state regulating the practice of architecture or engineering and shall affix his official seal to said plans, specifications and accompanying data, for the following:

1. All group A, E and I occupancies.
2. Buildings and structures three stories or more high
3. Buildings and structures 5,000 square feet or more in area. For all other buildings and structures, the submittal shall bear the certification of the applicant that some specific state law permits its preparation by a person not so registered.

**Exception:** Group R3 buildings, regardless of size shall require neither a registered architect nor engineer nor a certification that an architect or engineer is not required.

**106.4 By Whom Application Is Made.** –

Application for a plumbing permit shall be made by

the person or agent to install all or part of any plumbing system. The applicant shall meet all qualifications established by statute, or by rules promulgated by this code, or by ordinance or by resolution. The full name and address of the applicant shall be stated on the applications.

**106.5 Permit Issuance** - The application, construction documents and other data filed by an applicant for a permit shall be reviewed by the Building Official. If the Building Official finds that the proposed work conforms with the requirements of this code and all laws and ordinances applicable thereto, and that the fees specified in Section 106.3 have been paid, a permit shall be issued. Permits shall be issued only to a licensed and/or registered contractor who performs the work. If work is subcontracted both the contractors shall be licensed and/or registered.

**106.5.1 Reviewed Construction Documents.** -When the Building Official issues the permit where construction documents are required, the construction documents shall be endorsed in writing and stamped "REVIEWED." Such reviewed construction documents shall not be changed, modified or altered without authorization from the Building Official. Work shall be done in accordance with the reviewed construction documents.

The Building Official shall have the authority to issue a permit for the construction of part of a plumbing system before the construction documents for the entire system have been submitted or reviewed, provided adequate information and detailed statements have been filed complying with all pertinent requirements of this code. The holder of such permit shall proceed at his or her own risk without assurance that the permit for the entire mechanical system will be granted.

**106.5.2 Validity.** - The issuance of a permit or approval of construction documents shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of this code or of other ordinances of the jurisdiction. A permit presuming to give authority to violate or cancel the provisions of this code shall be invalid.

The issuance of a permit based upon construction documents and other data shall not prevent the Building Official from thereafter requiring the correction of errors in said construction documents and other data or from preventing building operations from being carried on thereunder when in violation of this code or of other ordinances of this jurisdiction. The inspection or permitting of a building, system, or plans by any jurisdiction, under the requirements of the Technical Codes, shall not be construed in any court as a warranty of the physical condition of such building, system or plans or their adequacy.

**106.5.3 Time Limitation** – An application for a permit for any proposed work shall be deemed void if the application is inactive for a period of 6 months. Works shall be considered suspended if an approved inspection has not been made within a 6 month period. One or more extensions of time for periods of not more than 90 days each may be allowed for active applications or permits by the Building Official for the application, provided the extension is requested in writing and justifiable cause is demonstrated.

**106.5.4. Repermitting previously permitted work.** When repermitting previously permitted work, the initial contractor will be required to issue a release letter releasing his/her permit. This letter shall be submitted to OCCE. Any contractor who repermits the work will submit a release letter releasing the previous contractor. This letter will be submitted from the owner or general contractor when applying for a new permit.

**106.5.5 Suspension Or Revocation Of Permit.** - The Building Official shall revoke a permit or approval issued under the provisions of this code in case of any false statement or misrepresentation of fact in the application or on the construction documents upon which the permit or approval was based.

**106.5.6 Retention Of Construction Documents.** - One set of construction documents shall be retained by the Building Official until final approval of the work covered therein. One set of reviewed construction documents shall be returned to the applicant, and said set shall be kept on the site of the building or job at all times during which the work authorized thereby is in progress.

**106.6 Fees.** - A permit shall not be issued until the fees prescribed in Appendix A have been paid, nor shall an amendment to a permit be released until the additional fee, if any, due to an increase of the plumbing system, has been paid.

**106.6.1 Work Commencing Before Permit Issuance.** -Any person who commences work on a plumbing system before obtaining the necessary permits shall be subject to 2 times the usual permit fee. If the same person commits a third violation of this requirement within 12 months of the first occurrence, the license holder will not be allowed to obtain a permit for that work until an appearance before the Plumbing Code Advisory Board for possible disciplinary action. When the property owner allows work to commence before the proper permits are obtained, he/she shall be required to obtain a licensed and bonded plumbing contractor and the plumbing contractor will be required to permit the work at 2 times the usual permit fee.



**106.6.2 Fee Schedule.** – The fees for all plumbing work shall be as indicated in Appendix A of this code.

**106.6.3 Fee Refunds.** – The procedures to apply for a refund and the amount of any refund provided to an applicant will be determined by the refund policy established in the fee ordinance and shown in Appendix A.

**106.7 Amended Construction Documents.** – Work shall be installed in accordance with the reviewed construction documents, and any changes made during construction that are not in compliance with the reviewed construction documents shall be resubmitted for review as an amended set of construction documents.

**106.8 No Warranty To Be Construed.** - The inspection of any building, system or plans by any jurisdiction, under the requirements of the Technical Codes, shall not be construed in any court as a warranty of the physical condition of such building, system or plans or their adequacy. No jurisdiction or any employee thereof shall be liable in tort for damages for any defect or hazardous or illegal condition or inadequacy in such building, system or plans, or for any failure of any component of such, which may occur subsequent to such inspection or permitting

## **Section 107 - Inspection and Testing**

**107.1 Required Inspections And Testing.** - The permit holder or the permit holder's agent shall verify that the work is completed and ready for inspection before scheduling an inspection. The first trip shall be considered as a rejection if the work is not ready for inspection when the inspector arrives, and if the work fails for any defect on the second trip a reinspection fee will be assessed. The Building Official, upon notification from the permit holder or the permit holder's agent, shall make the following inspections and other such inspections as necessary, and shall either release that portion of the construction or shall notify the permit holder or the permit holder's agent of violations that must be corrected. The holder of the permit shall be responsible for the scheduling of such inspections.

1. Underground inspection shall be made after trenches or ditches are excavated and bedded, piping installed, and before backfill is put in place. When excavated soil contains rocks, broken concrete, frozen chunks and other rubble that would damage or break the piping or cause corrosive action, clean backfill shall be on the job site.

2. Rough-in inspection shall be made after the roof, framing, fireblocking and firestopping, draft stopping and bracing are in place and all sanitary, storm and

water distribution piping is roughed in, and prior to the installation of wall or ceiling membranes.

3. Final inspection shall be made after the building is complete, all plumbing fixtures are in place and properly connected, and the structure ready for occupancy.

4. All work concealed prior to inspection and/or test shall be uncovered in its entirety for inspector and subject to any re-inspection fee.

**Note 1:** A registered state contractor, a licensed Master or Journeyman Plumber is required to be on site during any inspection which requires the system to be tested.

**Note 2:** See Section 312 of the *International Plumbing Code* for Test requirements.

**107.1.1 Approved Agencies.** – Test reports submitted to the Building Official for consideration shall be developed by approved agencies that have satisfied the requirements as to qualifications and reliability.

**107.1.1.1 Inspection Services** - The Building Official may make, or cause to be made, the inspections required by Section 107.1. He may accept reports of inspectors of recognized inspection services, provided that after investigation he is satisfied as to their qualifications and reliability. A certificate called for by any provision of the Technical Codes shall not be based on such reports unless the same are in writing and certified by a responsible official of such service.

**107.1.2 Evaluation And Follow-Up Inspection Services.** - Prior to the approval of a closed, prefabricated plumbing system and the issuance of a plumbing permit, the Building Official shall require the submittal of an evaluation report on each prefabricated plumbing system, indicating the complete details of the plumbing system, including a description of the system and its components, the basis upon which the plumbing system is being evaluated, test results and similar information, and other data as necessary for the Building Official to determine conformance to this code.

**107.1.2.1 Evaluation Service.** -The Building Official shall designate the evaluation service of an approved agency as the evaluation agency, and review such agency's evaluation report for adequacy and conformance to this code.

**107.1.2.2 Follow-Up Inspection.** - Except where ready access is provided to all plumbing systems, service equipment and accessories for complete inspection at the site without disassembly or dismantling, the Building Official shall conduct the in-plant inspections as frequently as necessary to ensure conformance to the approved evaluation report or shall designate an independent, approved inspection agency to conduct such inspections. The inspection agency shall furnish the Building Official

with the follow-up inspection manual and a report of inspections upon request, and the plumbing system shall have an identifying label permanently affixed to the system indicating that factory inspections have been performed.

**107.1.2.3 Test And Inspection Records.** - Required test and inspection records shall be available to the Building Official at all times during the fabrication of the plumbing system and the erection of the building; or such records as the Building Official designates shall be filed.

**107.2 Special Inspections.** - Special inspections of alternative engineering design plumbing systems shall be conducted in accordance with Sections 107.2.1 and 107.2.2 of this code.

**107.2.1 Periodic Inspections.** - The registered design professional or designated inspector shall periodically inspect and observe the alternative engineered design to determine that the installation is in accordance with the approved construction documents. All discrepancies shall be brought to the immediate attention of the plumbing contractor for correction. Records shall be kept of all inspections.

**107.2.2 Written Reports.** - The registered design professional shall submit a final report in writing to the Building Official upon completion of the installation, certifying that the alternative engineered design conforms to the approved construction documents. A notice of approval for the plumbing system shall not be issued until the written certification has been submitted.

**107.3 Testing.** - Plumbing work and systems shall be tested as required in Section 312 and in accordance with Section 107.3.1 through 107.3.3. Test shall be made by the permit holder and observed by the Building Official.

**107.3.1 New, Altered, Extended Or Repaired Systems.** - New plumbing systems and parts of existing systems, which have been altered, extended or repaired, shall be tested as prescribed herein to disclose leaks and defects, except that testing is not required in the following cases:

1. In any case that does not include addition to, replacement, alteration, or relocation of any water supply, drainage or vent piping.
2. In any case where the plumbing equipment is set up temporarily for exhibition purposes.

**107.3.2 Equipment, Material, And Labor For Tests.** - All equipment, material and labor used for testing a plumbing system or part thereof shall be furnished by the permit holder.

**107.3.3 Re-inspection And Testing.** - Where any work or installation does not pass any initial test or inspection, the necessary corrections shall be made to comply with this code. The work or installation shall then be resubmitted to the Building Official for inspection and testing no more than five (5) working

days after the previous inspection, unless a longer period is authorized in writing by the code official.

**107.3.4 Re-Inspection Fee For Excessive Or Repeat Inspection Calls.** - When an inspector rejects an inspection of part or all of a building, electrical, gas, mechanical and/or plumbing system or equipment due to the work being in violation or incomplete, or no plainly visible street address is posted on the job site, an additional fee shall be as set forth in the Fee Ordinance and Appendix B and charged for second re-inspection of the same infraction and each re-inspection thereafter until the infraction is corrected.

**107.3.4.1 Review Of Fee.** - Any person, firm or corporation aggrieved by the assessment of any re-inspection fee may appeal to the Chief Inspector for a review of the facts involved and a possible reduction or dismissal of said re-inspection fee.

**107.3.4.2 When Paid.** - Re-inspection fees shall be paid before the next inspection.

**107.4 Approval.** - After the prescribed tests and inspections indicate that the work complies in all respects with this code, a notice of approval shall be issued by the Building Official.

**107.4.1 Written Release** - Work shall not be done on any part of a building, structure, electrical, gas, mechanical or plumbing system beyond the point indicated in each successive inspection without first obtaining a written release from the Building Official. Such written release shall be given only after an inspection has been made of each successive step in the construction or installation as indicated by each of the foregoing three inspections.

**107.5 Temporary Connection.** - The Building Official shall have the authority to authorize the temporary connection of a plumbing system to the sources of energy or water for the purpose of testing plumbing systems or for use under a temporary certificate of occupancy.

**107.6 Assistance From Other Agencies.** - The assistance and cooperation of police, building, fire and health department officials and all other officials shall be available as required in the performance of duties.

## **SECTION 108 - VIOLATIONS**

**108.1 Unlawful Acts.** - It shall be unlawful for a person, firm or corporation to erect, construct, alter, repair, remove, demolish or utilize a plumbing system, or cause same to be done, in conflict with or in violation of any of the provisions of this code.

**108.2 Notice Of Violation.** - The Building Official shall serve a notice of violation or order to the person responsible for the erection, installation, alteration, extension, repair, removal or demolition of plumbing work in violation of the provisions of this code, or in

violation of a detail statement or the approved construction documents thereunder, or in violation of a permit or certificate issued under the provisions of this code. Such order shall direct the discontinuance of the illegal action or condition and the abatement of the violation.

**108.3 Prosecution Of Violation.** - If the notice of violation is not complied with promptly, the Building Official shall request the legal counsel of the jurisdiction to institute the appropriate proceeding at law or in equity to restrain, correct or abate such violation, or to require the removal or termination of the unlawful occupancy of the structure in violation of the provisions of this code or of the order or direction made pursuant thereto.

**108.4 Violation Penalties.** - Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter or repair plumbing work in violation of the approved construction documents or directive of the Building Official, or of a permit or certificate issued under the provisions of this code, shall be guilty of a civil offense punishable by a fine of not more than fifty (\$50) dollars per day per violation. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

**108.5 Stop Work Orders.** - Upon notice from the Building Official that work on any plumbing system is being done contrary to the provisions of this code or in a dangerous or unsafe manner, such work shall immediately cease. Such notice shall be in writing and shall be given to the owner of the property, or to the owner's agent, or to the person doing the work. The notice shall state the conditions under which work is authorized to resume. Where an emergency exists, the Building Official shall not be required to give a written notice prior to stopping the work and all construction work at that location shall cease. Any person who continues any work on the system after having been served with a stop work order will be considered to have committed a separate violation of this code and subject to legal action, except such work as that person is directed to perform to remove a violation or unsafe condition.

**108.6 Abatement Of Violation.** - The imposition of the penalties herein prescribed shall not preclude the legal officer of the jurisdiction from instituting appropriate action to prevent unlawful construction or to restrain, correct or abate a violation, or to prevent illegal occupancy of a building, structure or premises, or to stop an illegal act, conduct, business or utilization of the plumbing system on or about any premises.

**108.7 Unsafe Plumbing.** - Plumbing regulated by this code that is unsafe or that constitutes a fire or health hazard, unsanitary condition, or is otherwise

dangerous to human life is hereby declared unsafe. Any use of plumbing regulated by this code constituting a hazard to health, safety or public welfare by reason of inadequate maintenance, dilapidation, obsolescence, fire hazard, disaster, damage or abandonment is hereby declared an unsafe use. Any such unsafe equipment is hereby declared to be a public nuisance and shall be abated by repair, rehabilitation, demolition or removal.

**108.7.1 Authority To Condemn Equipment.** - Whenever the Building Official determines that any plumbing, or portion thereof, regulated by this code has become hazardous to life, health, or property, or has become unsanitary, the Building Official shall order in writing that such plumbing either be removed or restored to a safe or sanitary condition. A time limit for compliance with such order shall be specified in the written notice. A person shall not use or maintain defective plumbing after receiving such notice.

When such plumbing is to be disconnected, written notice as prescribed in Section 108.2 shall be given. In cases of immediate danger to life or property, such disconnection shall be made immediately without such notice.

**108.7.2 Authority To Disconnect Service Utilities.** - The Building Official shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by the technical code in case of emergency, where necessary, to eliminate an immediate danger to life or property. Where possible, the owner and occupant of the building, structure or service system shall be notified of the decision to disconnect utility service prior to taking such action. If not notified prior to disconnecting, the owner or occupant of the building, structure or service system shall be notified in writing as soon as practical thereafter.

**108.7.3 Connection After Order To Disconnect.** - No person shall make connections from any energy, fuel, power supply or water distribution system or supply energy, fuel or water to any equipment regulated by this code that has been disconnected or ordered to be disconnected by the Building Official or the use of which has been ordered to be discontinued by the Building Official until the Building Official authorizes the reconnection and use of such equipment. When any plumbing is maintained in violation of this code, and in violation of a notice issued pursuant to the provisions of this section, the Building Official shall institute appropriate action to prevent, restrain, correct or abate the violation.

## **Section 109 - Means Of Appeal**

**109.1 Membership Of Joint Board Of Appeals –**

The Memphis and Shelby County Joint Board of Appeals shall consist of a total of 17 appointed and 2 ex-officio members. Those appointed members, not employees of any government unit.

**109.2 Composition Of Board. -** Membership shall include representatives from the following classes:

1. Tennessee Licensed Architect
2. Tennessee Licensed Structural Engineer
3. Tennessee Licensed Building Contractor
4. Licensed Electrical Engineer
5. Licensed Electrical Contractor
6. Licensed Elevator Contractor or Manufacturer
7. Licensed Heating and Air Condition Contractor
8. Licensed Mechanical Engineer
9. Licensed Plumbing Contractor
10. Licensed Residential Contractor
11. Fire Prevention Representative
12. Licensed Fire Protection Contractor
13. Citizen-at-large
14. Member of the Building Code Advisory Board (Chairperson or Board Member appointed by the Chairperson)
15. Member of the Electrical Code Advisory Board (Chairperson or Board Member appointed by the Chairperson)
16. Member of the Mechanical Code Advisory Board (Chairperson or Board Member appointed by the Chairperson)
17. Member of the Plumbing Code Advisory Board (Chairperson or Board Member appointed by the Chairperson)

**109.3 Appointed Ex-Officio Members. -** After the above categories of members have been appointed, the Mayors shall appoint such other person as each may deem qualified to serve as ex-officio members.

**109.4 Other Ex-Officio Members. –** In addition, the building official of the City of Memphis and Shelby County and the fire Marshall of the City of Memphis shall serve as ex-officio members without a vote.

**109.5 Appointments. –** All appointed members of the Board shall be appointed by both Mayors and approved by the Memphis City Council and Shelby County Board of Commissioners.

**109.6 Term Of Office. –** The term of office of the board members shall be staggered so no more than 1/3 of the Board is appointed or replaced in any 12 month period. The two alternates, if appointed, shall serve one year terms.

**109.6.1 Vacancies For Unexpired Terms. -**

Vacancies for unexpired terms shall be filled in the manner in which the original appointments are required to be made. All appointed Board members shall be residents of Shelby County and shall serve without pay.

**109.6.2 Oath. -** All members shall qualify and take an oath to uphold the Constitution of the United

States and the State of Tennessee and faithfully discharge the duties of their office.

**109.6.3 Absence Shall Be Cause For Removal. –**

Continued absence of any member from required meeting of the Board shall, at the discretion of the applicable governing body, render any such member subject to immediate removal from office.

**109.7 Quorum And Voting. –** A simple majority of the Board shall constitute a quorum. In varying any provision of this code, the affirmative votes of  $\frac{3}{4}$  members present, but not less than five affirmative votes, shall be required. In modifying a decision of the building official, not less than five affirmative votes of the members present. In an approving an equal to better or better method, the majority affirmative votes shall be required. In the event that regular members are unable to attend and a quorum is not present, the Building Official shall be empowered to appoint alternative members to obtain a quorum.

**109.8 Absence Of Members. –** During absence of a member by reason of disability or disqualification, the Administrator shall designate a qualified substitute. However, 3 successive unexcused absences from any regular or special meetings shall be grounds for termination at the will and pleasure of the appointing Mayor without the necessity of a hearing and the action shall be final.

**109.9 Chairperson And Vice Chairperson Of The Joint Board Of Appeals. –** At the first meeting of each year, the Board shall select one of its members to serve as Chairperson for the year, and one of its members to serve as Vice Chairperson.

**109.10 Secretary Of The Board. –** The Building Official shall act as secretary of the Board and shall make a detailed record of all of its proceedings, which shall set forth the reasons for its decisions, the vote of each member, and the absence of a member and any failure by a member to vote.

**109.11 Power. –** The Joint Board of Appeals shall have power, as further defined in section 108.4 of the technical codes to hear appeals of decisions and interpretations of the Building Official and consider variances of the technical codes.

**109.12 Appeals**

**109.12.1 Decisions Of The Building Official –** The owner of a building, structure or service system, or his duly authorized agent, may appeal a decision of the Building Official to the Joint Board of Appeals whenever any one of the following conditions are claimed to exist:

1. The Building Official rejected or refused to approve the mode or manner of construction proposed to be followed or materials to be used in installation or alteration of a building, structure or service system.
2. The provisions of this code do not apply to this specific case

3. That an equally good or more desirable form of construction can be employed in any specific case.
4. The true intent and meaning of the code or any of the regulations thereunder have been misconstrued or incorrectly interpreted.

**109.13 Variances.** – The Joint Board of Appeals, when so appealed to and after hearing, may vary the application of any provision of this code to any particular case when, in its opinion, the enforcement thereof would do manifest injustice and would be contrary to the spirit and purpose of this or the technical codes or public interest, and also finds all of the following:

1. That special conditions and circumstances exist which are peculiar to the building, structure or service system involved and which are not applicable to others.
2. That the special conditions and circumstances do not result from the action or inaction of the applicant;
3. That granting the variance requested will not confer on the applicant any special privilege that is denied by the code to other buildings, structures, or service systems.
4. That the variance granted is the minimum variance that will make possible the reasonable use of the building, structure or service system
5. That the grant of the variance will be in harmony with the general intent and purpose of this code and will not be detrimental to the public health, safety and general welfare.

**109.14 Conditions On The Variance.** – In granting the variance, the Board may prescribe a reasonable time limit within which the action for which the variance is required shall be commenced or completed or both. In addition, the board may prescribe appropriate conditions and safeguards in conformity with this code. Violations of the conditions of a variance shall be deemed a violation of this code.

**109.15 Notice Of Appeal.** - Notice of appeal shall be in writing and filed within 30 calendar days after the decision is rendered by the building official. Appeals shall be in a form acceptable to the Building Official.

**109.16 Unsafe Or Dangerous Building Or Service System.** – In the case of a building, structure or service system which in the opinion of the Building Official is unsafe, unsanitary or dangerous, the Building Official may, in his order, limit the time for such appeals to a shorter period.

**109.17 Procedures Of The Board**

**109.17.1 Rules And Regulations** – the board shall establish rules and regulations for its own procedure not inconsistent with the provisions of this code. The board shall meet on call of the Chairperson. The Board shall meet within 30 calendar days after notice of appeal has been received.

**109.18 Decisions.** - The Joint Board of Appeals shall, in every case, reach a decision without unreasonable or unnecessary delay. Each decision of the Board shall also include the reasons for the decision. If a decision of the Board reverses or modifies a refusal, order or disallowance of the Building Official or varies the application of any provision of this code, the building official shall immediately take action in accordance with such decision. Every decision shall be promptly filed in writing in the office of the Building Official and shall be open to public inspection. A certified copy shall be kept publicly posted in the office of the Building Official for two weeks after filing. Every decision of the board shall be final; subject however to such remedy as any aggrieved party might have at law or in equity.

**Section 110 - Violations and Penalties**

**110.1 Violation A Civil Offense.** – Any person, firm, corporation or agent who shall violate a provision of the Technical Codes, or fail to comply therewith, or with any of the requirements thereof, or who shall erect, construct, alter, install, demolish or move any structure, electrical, gas, mechanical or plumbing system, or has erected, constructed, altered, repaired, moved or demolished a building, structure, electrical, gas, mechanical or plumbing system in violation of a detailed statement or drawing submitted and permitted thereunder, shall be guilty of a civil offense. Each such person shall be considered guilty of a separate offense for each and every day or portion thereof during which any violation of any of the provisions of the Technical Codes is committed or continued, and upon conviction of any such violation such person shall be punished within the limits and as provided by this Code.

**110.2 Fines Established** – Any person, firm or corporation who shall violate a provision of the Technical Codes or fail to comply with any of the provisions thereof, or violate a detailed statement or plans submitted or approved, shall be guilty of a separate offense for each day during which any violation of any provisions of the Technical Codes are committed or continued, and upon conviction in the court of jurisdiction for any such violation such person shall be punished by a fine of not more than \$50.00. Each day or part thereof that a violation continues shall be deemed a separate offense.

**110.3 Prohibition of Interference.** – Any person interfering with the Building Official or his assistants in the performance of their duties shall be guilty of a violation of this code

**110.4 Authority To Institute Suit.** – When, in the decision of the Building Official or his assistants, there has been a violation of the Technical Codes, the Building Official or any other officer, board, or

properly authorized person, in addition to any other remedies provided by law and the Technical Codes, is hereby authorized to institute suit in any appropriate manner to prevent, enjoin, or abate such violation.

**110.5 Withholding Permits.** – The failure to respond to official correspondence from the Building Official or his designee after registered mailing by said Board to the contractor's address of record (record with the Office of Construction Code Enforcement) shall be deemed a sufficient reason to withhold permits, and every contractor shall be held responsible for the violation of the Technical Codes by his employees. Permits shall be issued only to a licensed and/or registered contractor. No permit shall be issued to any licensed and/or registered contractor during the time that he shall fail to remedy defective work or fail to call for inspections after being informed by the Building Official or his designee that he has been held responsible therefore under the Technical Codes. Any other violation of the Technical Codes shall also be grounds for withholding permits.

**110.6 Sale Of Dangerous Appliances, Devices And Material.** – It shall be a violation for any person in the County to sell or offer for sale, any electrical, gas, mechanical or plumbing appliance, devices and materials that when used, are dangerous to life, health or property. Appliances, devices, and materials without an approved label from a recognized testing laboratory may be determined unsafe.

**110.7 Cutting Off Utility Service Which Is Unsafe Or Improperly Installed.**

**110.7.1 Authority Provided.** - The Building Official or his duly authorized representative is empowered, and it shall be his duty, to cause the termination of electric, gas, or water service supplying buildings, wiring systems, equipment, plumbing systems, and/or devices which are deemed by him to be unsafe, or which have not been installed in conformity with the provisions of the Technical Codes, and such power shall not be resumed until all the provisions of the Technical Codes are complied with and approved.

**110.7.2 Notification To Owner.** – The Building Official or his duly authorized representative shall notify the owner or user and the person performing electrical, gas, and/or plumbing in violation of the Technical Codes, as defined in Section 110.7.1, to correct such violations immediately or within the time designated. Failure to comply with said notice shall require the Building Official to order the serving utility to terminate part of or all utilities service supplying service to the building's wiring systems, equipment, gas system, plumbing systems, and/or devices which are deemed by him to be in an unsafe condition or installed in violation of the requirements of the Technical Codes until the notice is complied with and approved.

**110.7.3 Absentee Owners Of Rental Property.** –

Absentee owners of rental property receiving notice of defective or unsafe, unsanitary or dangerous conditions in a building, structure or service system who fail to have such condition corrected as specified in the notice, shall be guilty of violating the Technical Codes and shall be fined not less than \$50.

**110.7.4 Authority To Disconnect Service Utilities.**

– The Building Official shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by the Technical Codes, in case of emergency where necessary to eliminate an immediate hazard to life or property. The Building Official shall notify the serving utility, and wherever possible the owner and occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner or occupant of the building, structure or service system shall be notified in writing, as soon as practicable thereafter.

**110.8 Removal Of Defective Work.** – Construction work installed in violation of the Technical Codes or in an otherwise unlawful manner shall be removed in its entirety on order, in writing, from the Building Official or his duly authorized representative and shall be reinstalled in a lawful manner as prescribed by the Technical Codes.

**110.9 Threatening Eviction** - It shall be considered a violation and punishable, as provided in Section 110.1, for an owner to threaten an occupant with eviction for reporting defective and unsafe, unsanitary or dangerous conditions of a building, structure or service system.

**110.9.1 Responsibilities** – The Technical Codes shall not be construed to affect the responsibilities or liabilities of any person owning, operating, controlling or installing material, devices, appliances, or equivalent for damages to persons or property caused by any defects therein, nor shall the City of Memphis and/or Shelby County be held to assume any such liability by reason of the approval of any material, device, appliance, or equipment authorized herein.

**110.9.2 Governmental Purpose Of Technical Codes.**

– The regulations provided in the Technical Codes and/or Ordinances are hereby declared to be governmental and for the benefit of the public. Any member of the governing bodies of Memphis or Shelby County, or any official or employee, or board member charged with the enforcement of the Technical Codes acting for the City and County in the discharge of his duty, shall not thereby render himself personally liable, and he is hereby relieved from all personal liability for any damage that may accrue to persons or property as the result of an act required or permitted in the discharge of his duties.

Any suit brought against such official or employee, because of such act performed by him in the enforcement of any provision of the Technical Codes shall be defended by the County and/or City Attorney until the final adjudication of the proceedings.

#### **110.10 False Representation**

**110.10.1 Violation For False Advertising.** – It shall be a violation for any person engaged in the contracting business to exhibit any sign or advertise in any media representing himself to be other than that for which he has been licensed as required by the Technical Codes.

**110.10.2 Advertising By Name.** – It shall be a violation for any person, firm, corporation or any other business that engages in, seeks to engage in, or follows the business or occupation of contracting to advertise in any form or media under any name other than the same company name on the application Licensed or Certified State Contractor has on file with the Office of Construction Code Enforcement.

**110.10.3 Inspector.** – It shall be a violation for persons not employed by the authority having jurisdiction established in State statute and local codes or ordinances, to represent themselves to the public as an inspector.

**110.10.3.1 Inspections Not Prohibited** – This section does not preclude licensed engineers from making inspections when approved in advance by the Building Official as required in performing their duties.

**110.10.4 Penalty For Violation.** - Any person, firm or corporation who violates this provision shall be punished by a fine of not less than \$1.00 nor more than \$50 for each offense. Each day during which the violation shall be continued shall be a separate offense

**110.11 Concealed Improper Or Defective Building, Electrical, Gas, Mechanical And/Or Plumbing Systems.** – Any person intentionally concealing from view improperly connected joints or any defective or substandard construction work including but not limited to, spliced wires, piping, gas lines, framing, etc., shall be guilty of a violation and punishable by a fine as provided in Section 110.1 and 110.2.

**110.12 Connecting Or Utilizing Electric Gas Or Water Services.** - Any person who shall connect or utilize service at a job site where the electrical, gas or plumbing work has been provided in a manner contrary to the provisions and regulations of the Technical Code shall be guilty of a violation and subject to a fine according to the provisions of section 110.1 and 110.2.

### **Section 111-Technical Code Boards**

**111.1 Scope.** -The public safety requires that persons engaged in the activities listed below, and any related activities, be qualified to perform such duties competently and in compliance with the Technical Codes.

1. The construction, alteration, repair, equipment, use and occupancy, location, maintenance, removal and demolition, of every building or structure or any appurtenances connected or attached to such building or structures.

2. The installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, and related accessories as covered by the Technical Codes.

3. The installation of mechanical systems, including alterations, repairs, cooling, air conditioning and refrigeration systems, incinerators, and other energy related systems.

4. Plumbing installation, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances, and connections to a water or sewage system.

The introduction of new materials and assemblies, recommendations of the contractors and other circumstances may, require changes in the Technical Codes: and since the Administrator, Building Official and the Chief Inspectors may require professional, qualified and experience consultants to advise them in matters pertaining to construction work, the Boards are herewith established.

**111.2 Duties Of The Technical Advisory Boards.** – The duties of the technical advisory boards shall consist of, but are not limited to, the following:

1. Recommend the use of new materials or assemblies of materials for acceptance and approval or rejection

2. Recommend changes in the Technical Codes suggested by changes in the International Codes and National Electric Code.

3. Recommend any other proposed changes in the Technical Codes.

4. Act as advisors to the Administrator, Building Official or the Chief Inspectors and when necessary suspending or revoking the license of or otherwise disciplining a license holder.

5. Recommend license, registration and examination fee changes to the Administrator when appropriate.

#### **111.3 Membership Of The Plumbing Code Advisory Board**

**111.3.1 Establishing The Board** – The Plumbing Code Board shall consist of 10 appointed members, who shall serve for a period of 3 years with their terms staggered so that no more than 4 terms expire in one year. All appointed members of the Board shall be appointed by either the Mayor of Memphis or the Mayor of Shelby County and approved respectively by the City Council or the County

Commission. Each Mayor will make half of the appointments that are to be made in each year. The Building Official and Chief Plumbing Inspector shall serve as ex-officio members without a vote. Additionally, representatives from MLGW, Fire Marshal's Office for the City of Memphis and for the County of Shelby, shall serve as ex-officio members without the right to vote.

**111.3.2 Composition Of The Board.** – Membership of the Plumbing Code Board shall include the following:

1. Master plumber primarily doing residential work
2. Master plumber primarily doing commercial work
3. Master plumber primarily doing industrial work
4. Master plumber primarily doing service work
5. Plumbing contractor primarily doing residential work
6. Plumbing contractor primarily doing commercial work
7. Plumbing contractor primarily doing industrial work
8. Plumbing equipment manufacturer or supplier
9. State of Tennessee Engineer (mechanical) experienced in designing plumbing and drainage
10. Citizen Member

**111.3.2.1 Ex-Officio Members.** - After the above categories have been appointed, the Mayors may appoint such other persons as each may deem qualified to serve as ex-officio members. Such members shall not have the right to vote.

**111.3.3 Absence Of Members.** – During the absence of a member by reason of disability or disqualification, the Administrator or Building Official shall designate a qualified substitute. However, 3 successive unexcused absences from any regular or special meetings shall be grounds for termination at the will and pleasure of the appointing Mayor without the necessity of a hearing and such action shall be final.

**111.3.4 Chairperson, Vice-Chairperson, and Secretary to the Plumbing Code Board.** – At the first meeting of each year, the Board shall select one of its members to serve as Chairperson for that year and one of its members to serve as Vice-Chairperson. The Building Official shall serve as Secretary for the Board. The chairperson of the meeting shall be excluded from any vote at that meeting except to break a tie. The Chairperson or Vice-Chairperson, or selected board member of the Plumbing Code Board shall serve on the Joint Board of Appeals with one vote representing their discipline.

**111.4 Meetings Of The Board** – The Board shall be subject to meetings at the call of the Chairperson, the Administrator or the Building Official. Each member shall be given 5 days notice before the date of any called meeting.

**111.5 Decisions And Findings Of The Board**

**111.5.1 Administrative Issues.** – The Board shall report its decisions, findings and recommendations in writing to the Administrator, who, if he approves, shall cause recommendations concerning the administration of the OCCE to be proposed for enactment

**111.5.2 Technical Issues.** - The Board shall report its decisions, findings and recommendations in writing to the Building Official, who, if he approves, shall cause recommendations concerning the technical codes of the OCCE to be enacted

**111.6 Quorum.** – A simple majority of the Board shall constitute a quorum. In the event that the regular members are unable to attend and a quorum is not present, the Administrator or the Building Official shall be empowered to appoint alternate members to obtain a quorum.

**111.6.1 Minutes Of Meetings** – The Administrator or Building Official shall designate one of the employees of the OCCE to complete accurate minutes at each meeting and make them available to the Board members.

## **Section 112 – Licensing**

**112 Plumbing Contractor Licenses.** – It shall be the duty of every contractor, who shall make contracts for the installation or repair of plumbing systems for which a permit is required, and every contractor making such contracts and subletting the same, or any part thereof, to pay a license tax as required by the general license ordinance. He must also register his name in a book provide for that purpose, with the Chief Plumbing Inspector, giving his full name, residence, and place of business, and in case of removal from one place to another, to have made corresponding change in said register accordingly. It shall be the further duty of every such person to give good and sufficient bond in a sum prescribed and as required by the applicable governing body, conditioned to conform to the plumbing regulations, the regulations of this Section, and other ordinances or laws of the applicable governing body.

**112.1 Plumbers License.** – No person or firm shall engage in or work at the business of plumbing, unless such person or firm shall first receive a license to engage therefore in accordance with the provisions of the Technical Codes. The license so issued shall specify the name of the person to whom it is issued, and if issued to a firm or corporation; the license or certificate shall also specify the name of the person through whom the application for license was made. No master plumber's name shall be permitted to appear on more than one license or certificate at any time. The license so issued shall not be assignable or transferable, either directly or indirectly to any other person.



**112.2 Plumber's Presence.** – Where any plumbing work is being done, a master or journeyman plumber shall, at all times, be present on the job and in actual control and in charge of the work being done

**112.3 Issuance Of License.** – License shall be obtained from the proper local governing body after fully complying with Section 112.

**112.4 Bond Required.**

**112.4.1 Amount** – Every person doing business in Memphis and Shelby County as a Registered and/or Licensed Plumbing Contractor shall file with the Building Official, a permit bond in the penal sum of \$25,000 and issued by an incorporated insurance company authorized to do business in the State of Tennessee. If a single legal entity/Contractor maintains two or more licenses with the Office of Construction Code Enforcement that require bonding, the total amount of all bonds required shall not exceed \$50,000.

**112.4.2 Conditions.** – The conditions of such bonds shall be that the principal and surety shall indemnify the City of Memphis and County of Shelby for their own use, and/or to any citizen against loss by improper compliance with the Technical Codes and any other law or ordinance governing such work; that the principal will suffer no work to be done without a permit, and will report work done for inspection by the Building Official in conformity to the Technical Codes.

**112.4.3 Duration.** – Such bond shall be continuous and remain in effect every year thereafter, unless cancelled by providing written notice to the principal and obligee. Immediately upon receiving written notice of cancellation, the Building Official shall require a new bond be furnished. The proper bond form will be furnished by the Building Official.

**112.4.4 Effect of Cancellation.** – Every Contractor who fails to furnish a new bond as required above shall be deemed to have ceased to engage in the business of contracting. No further permits for work under the Technical Codes shall be issued, nor shall work proceed on permitted work until the required bond is furnished.

**112.5 General Regulations On The Licensed And Registered Plumbers.**

**112.5.1 Limitation On Work By Journeyman Plumbers.** – No registered journeyman plumber shall perform any plumbing or drainage work except for a licensed and bonded master plumber. No registered journeyman plumber shall solicit or contract work.

**112.5.2 Limitation On Work For Plumbing Apprentices.** – No registered plumbing apprentice shall perform any plumbing or drainage work except as an assistant under the supervision of a person holding certificates of competency and registration as a master plumber or as a journeyman plumber.

**112.5.3 Master Plumber Shall Not Employ Unregistered Journeyman Or Apprentices.** – No person holding a certificate of competency and/or a certificate of registration as a master plumber from the board of examiners as provided in this chapter shall employ or supervise any person in performing plumbing or drainage work, unless such person is duly registered pursuant to the Technical Codes.

**112.5.4 Master Plumber Shall Not Permit Unsupervised Work By Apprentices.** – No person holding a certificate of competency and/or a certificate of registration as a master plumber under this chapter shall permit any plumbing apprentice to perform any plumbing or drainage work except as an assistant under the supervision of a person holding a certificate of competency and registration as a master plumber or a certificate of registration as a journeyman plumber. The master plumber shall notify the Chief Plumbing Inspector's Office of any unregistered Apprentice Plumbers employed by the Master Plumber and shall register same within 60 days.

**112.5.5 Advertisement By Plumbing Contractors.** – All advertisement by plumbing contractors or master plumbers, including but not limited to, yellow pages, newspaper advertisements, and listings, shall include the city and/or county license number of the master plumber and the name of the firm.

**112.6 Application For License.** – Application for license under this Code shall be made to the Chief Plumbing Inspector on a form to be supplied by the Building Official. The Chief Plumbing Inspector shall review the application to determine the qualification of the applicant after payment of the fee and proof of experience relevant to the level of license has been given by applicant.

**112.6.1 Reserved.**

**112.6.2 Examination Of Applicants For Master Plumber License**

**112.6.2.1 Part Of Examination.** – The examination for master plumber shall consist of three parts:  
Part 1 Written Question and answer as directed  
Part 2 Diagram work as directed  
Part 3 Take-off on Diagram as directed.

**112.6.2.2 Passing Grade.** – A passing grade for the master plumber examination shall be a minimum of 70% on each part.

**112.6.3 Examination Of Applicants For Journeyman Plumber**

**112.6.3.1 Part Of Examination.** – The examination for journeyman plumbers shall consist of 2 parts:  
Part 1 Written question and answer as directed  
Part 2 Diagram work as directed.

**112.6.3.2 Passing Grade.** – A passing grade for the journeyman plumber examination shall be a minimum of 70% on each part.

**112.7 Requirements Of Experience**

**112.7.1 Minimum Requirements For Master Plumber.** - Before making application to the Plumbing Code Board to take the examination for licensing as a master plumber, each applicant must provide proof that he is a graduate engineer from an accredited college or university with at least 4 years experience in the design and installation of plumbing systems or that he is a licensed journeyman plumber and has a minimum of 4 years experience in the installation of plumbing systems as a journeyman plumber.

**112.7.2. – Minimum Requirements For Journeyman Plumber.** - Before making application to the Plumbing Code Board to take the examination as a journeyman plumber, each applicant must provide proof that he has had a minimum of 3 years experience installing or helping install plumbing installations.

**112.7.3 Carrying Work Card.** – Every person holding a license or certificate of registration under the Technical Codes shall, when performing work permitted by the Technical Codes, have his license registration on his person for proper examination by qualified persons requesting the examination of his card.

**Section 112.8 Vehicle used to identify ownership.** - All trucks and similar vehicles used by plumbing contractors or their employees shall be conspicuously displayed on body of both sides of said vehicles, in any color in contrast to the vehicle's body, the following identification: the full name of the firm to which it belongs, in lettering at least two inches high on the top line, and the wording MSC in lettering at least 1-1/2 inches on the second line along with the contractor's license number.

**112.8.1 Temporary Vehicles** – In the event a contractor obtains a vehicle for temporary use, he will be permitted to identify said vehicle by placing on it, in a clearly visible position on both sides, a temporary sign or decal letters which may be easily removed. Said temporary sign or letters shall conform to the same requirements as permanent lettering described hereinabove.

**112.9 Altering, Lending, Etc., License; Use Of Another's License; Evasion Of Licensing.**

**112.9.1 Misuse Or Misrepresentation A Civil offense.** – It shall be a civil offense for any person licensed under the Technical Codes to alter, transfer, lend or rent his license or to use a license not his own. It shall also be a civil offense for a person to falsely represent himself to be licensed under the Technical Codes or to wrongfully use a license.

**112.9.2 Misrepresentation Of Business Relationship.** - It shall also be a civil offense for any person to falsely represent the nature or extent of the business relationship between two or more persons, firms or corporations for the purpose of evading the

licensing or other requirements of the Technical Codes.

**112.10 Expiration of License; Annual And Renewal Fees.**

**112.10.1 Term.** - A license issued under the Technical Codes shall expire on September 30<sup>th</sup> of each year. Annual renewal of each license shall be made during the month of September. A late fee of \$10 shall accompany any request for renewal of license received after the date of expiration. Any person whose license is not renewed within 2 years after the expiration thereof shall be required to make a new application, pass the required examination, and pay the appropriate fees before his new license is issued. Payment of a late fee in no way shall relieve the licensee of any other penalties which arise from the performing work with an expired license.

**112.10.2 Annual And Renewal Fees.** - Annual and renewal fees shall be as follows:

1. Master plumber \$150
2. Journeyman plumber \$ 30
3. Apprentice plumber \$ 12
4. Septic Tank Cleaner and Installer \$ 100

**112.10.3 Inactive Licenses.** - As used in the Technical Codes, inactive master and journeyman plumbers is defined to include any individual who is duly licensed and who holds a current license under the Technical Codes, but who is not presently active in his license capacity. Any person holding an inactive license shall be required to pay \$15 per year as an inactive license holder, or the license shall expire. Before resuming duties as an active license holder, the required active fee shall be paid.

**112.11 Suspension Or Revocation Generally**

**112.11.1 Grounds For Action.** - Any license issued under the Technical Codes may be suspended or revoked by the Plumbing Code Advisory Board upon a violation of the terms of this chapter or any other ordinance or law governing the installation or inspection of plumbing work; provided, however, charges shall be preferred in writing by the Board and served upon the licensee, and the licensee shall be given the right to hearing concerning such charges.

**112.11.2 Conspiracy To Evade Code**

**Requirements.** - Any person licensed under this chapter who conspires with another person or firm to evade any of the provisions of this chapter or other ordinances or laws governing plumbing work shall have that license suspended or revoked, either temporarily or permanently, by the Plumbing Code Board upon submission of proof that such conspiracy exists or did exist.

**112.11.3 Repeated Work Failure.** - Violation of any provision of the Technical Code and repeated failure to have his work pass inspection shall be grounds for suspension or revocation of licenses issued under the Technical Codes. No person licensed under the

Technical Codes shall have his license revoked without an opportunity to appear before the Plumbing Code Board to be heard in his own defense.

**112.12 Special Grounds For Revoking Or Suspending License.**

**112.12.1 Use Of Unlicensed Employees.** - It shall be grounds for the Plumbing Code Board to suspend or revoke the license of any master plumber licensed under this chapter upon proof that said plumbing contractor used an unlicensed employee for the purpose of performing any work for which a license is required and for which it is required to obtain a permit under the Technical Codes.

**112.12.2 Incomplete Work.** - All licensed master plumbers and septic tank cleaners and installer shall be responsible for completing all work performed under the permits issued in their names in accordance with the provisions of the Technical Codes and to the satisfaction of the Chief Plumbing Inspector. Failure to satisfactory complete said work or to cure any defect in said work shall be grounds for the suspension or revocation of that master plumber's or septic tank cleaner's or installer's license.

**112.12.3 Improper Supervision.** - The failure of any plumbing contractor or septic tank cleaner/installer to properly supervise, direct, or control any and all plumbing work performed under a permit issued through his license as a master plumber or as a septic tank or installer shall be grounds for the suspension or revocation of that license by the Plumbing Code Board, regardless of whether said work was performed by an employee of the master plumber or septic tank cleaner or installer that they represent.

**112.12.4 Failure To Respond To Official Communication.** - The failure of any licensed master plumber or septic tank cleaner or installer to answer official correspondence from the Building Official, Chief Plumbing Inspector or Plumbing Code Board, without good cause, within 15 days after its receipt by certified mail, shall be grounds for the suspension of that master plumber or septic tank cleaner's or installer's license until such time as appropriate response is received.

**ADD or AMEND Section 202 as follows:**

**Active Trap.** The term active trap shall mean a trap which serves as the trap for a plumbing fixture or drain which is used on a regular or semi-regular basis.

**Administrator.** Whenever the term “Administrator” is used in the Memphis & Shelby County Plumbing Code herein adopted, it shall mean the Administrator of the Memphis & Shelby County Construction Code Enforcement.

**Administrative Authority.** Whenever the term “Administrative Authority” is used in the Memphis & Shelby County Plumbing Code herein adopted, it shall mean the Building Official.

**Air Conditioning Unit.** The condensate or waste from an air conditioning unit shall be classified as a plumbing fixture and shall connect to the plumbing system as an indirect connection as per amendments of Chapter 3 of this Code.

**ADD or AMEND Section 202 as follows:**

**Board of Appeals.** Whenever the term “Board of Appeals” is used in the Memphis & Shelby County Plumbing Code herein adopted, it shall mean the Memphis & Shelby County Board of Appeals of Memphis and Shelby County, Tennessee.

**Building Department.** Whenever the term “Building Department “ is used in the technical codes herein adopted, it shall mean the Office of Construction Code Enforcement of Memphis and Shelby County, Tennessee.

**Building Official.** The officer or the other designated authority, or their duly authorized representative, charged with the administration and enforcement of the technical codes.

**Chief Appointing Authority.** Whenever the term “Chief Appointing Authority” is used in the technical codes herein adopted, it shall mean the Mayors of the City of Memphis, and Shelby County, Tennessee.

**City Municipality or Governing Body.** Whenever the word “City” or “Municipality” or “Governing Body” is used in the technical codes herein adopted, it shall mean the City of Memphis and Shelby County, Tennessee.

**ADD or AMEND Section 202 as follows:**

**Deep Seal Trap.** A term applied to a trap having a water seal of 4 inches or more. However, when applied to deep seal traps used in lieu of catch basins, such traps shall have at least a 12 inch water seal, a back water valve on the outlet when required, and cleanouts placed directly on top of each leg of said trap. When no backwater valve is required, a cleanout shall be placed on the inlet leg of the trap. The outlet turn of the trap shall transition from vertical to horizontal by the use of a short sweep for a pipe diameter two inches and less. Diameters two and one half inches and above shall require the use of two 1/8 bends (45° turns) on the outlet.

**Direct Supervision.** The term “Direct Supervision” shall be construed to mean supervision of an apprentice plumber by a master plumber or journeyman plumber while the apprentice is installing plumbing work. The journeyman or master plumber supervising said apprentice shall be actually present on the same job site at all times in which the apprentice is working.

**Employee.** A person working directly for a licensed plumbing contractor for wages or salary subject to Federal and/or State Payroll Tax Laws. A person contracting, sub-contracting or performing plumbing work in any other manner except as described above shall be considered an agent and shall not be construed as an employee.

**ADD or AMEND Section 202 as follows:**

**Floor Sink.** A type of indirect liquid waste receptor designed with a removable basket strainer or beehive strainer for the purpose of receiving the discharge from indirect liquid waste pipes only. This classification does not include floor drains with floor level strainers only, but may include 3-inch drains with floor level strainers which incorporate funnel drains as an integral part thereof. Floor sinks shall only receive the discard of indirect waste pipes and shall not be intended to be used as floor drains.

**Indirect Waste Receptor.** A plumbing fixture designed specifically to collect and dispose of liquid waste from other plumbing fixtures, plumbing equipment, or appliances which are required to discharge to the drainage system through an air gap or air break. The following type fixtures fall within the classification of indirect waste receptors: Floor sinks, mop sinks, service sinks, standpipe drains with integral air gaps, hub drains.

**Indirect Waste System.** An Indirect Waste System shall be defined as any arrangement that separates the sanitary piping system from another drainage system by the use of deep seal traps, interceptors, separators, neutralizing tanks or basins and may include a connection to the house side of specified traps that connect directly to the sanitary piping system.

**International Building Code.** Whenever the words “International Building Code” are used in the codes herein adopted, they shall mean the International Building Code with Local Amendments and will be known as the Joint Building Code of Memphis and Shelby County, Tennessee.

**International Electrical Code.** Whenever the words “International Electrical Code” are used in the codes herein adopted, they shall mean the 2008 National Electrical Code (NEC) with Local Amendments and will be known as the Joint Electrical Code of Memphis and Shelby County, Tennessee.

**International Fuel Gas Code.** Whenever the words “International Fuel Gas Code” are used in the codes herein adopted, they shall mean the 2009 International Fuel Gas Code with Local Amendments and will be known as the Joint Gas Code of Memphis and Shelby County, Tennessee.

**International Mechanical Code.** Whenever the words “International Mechanical Code” are used in the codes herein adopted, they shall mean the 2009 International Mechanical Code with Local Amendments and will be known as the Joint Mechanical Codes of Memphis and Shelby County, Tennessee.

**International Plumbing Code.** Whenever the words “International Plumbing Code” are used in the codes herein adopted, they shall mean the 2009 International Plumbing Code with Local Amendments and will be known as the Joint Plumbing Code of Memphis and Shelby County, Tennessee.

**Journeyman Plumber.** The term “Journeyman Plumber” as used in the Technical Codes is defined to be any individual duly licensed under the Technical Codes to do plumbing work only under the supervision of, and as an employee of, a master plumber who will have procured the permit for the plumbing work being performed.

**Licensed Contractor.** Licensed Contractor will be the same as Plumbing Contractor as defined by the State of Tennessee Licensing Board.

**ADD or AMEND Section 202 as follows:**

**Master Plumber.** The term “Master Plumber” as used in the Technical Codes is defined to be any individual duly licensed by the Memphis & Shelby County Office of Construction Code Enforcement with all the privileges afforded a journeyman plumber and with the added privilege of engaging in the plumbing business solely or in supervision of others.

**Memphis Pattern Deep Seal Trap.** Such traps shall have at least a 12-inch water seal, backwater valve on outlet, and cleanouts placed directly on top of each leg of trap. Also reference the term **Deep Seal Trap**.

**Plumbing Contractor.** Whenever the term “Plumbing Contractor” is used in the Technical Codes herein adopted, it shall mean a plumbing contractor who holds a current license issued by Memphis & Shelby County Construction Code Enforcement.

**Plumber’s Helper.** Same as Apprentice Plumber. Whenever the word “employee” is used in the Memphis & Shelby County Plumbing Code herein adopted, it shall mean a person working directly for a licensed contractor for wages or salary subject to Federal and/or State Payroll Tax Laws.

**Plumbing Section.** Whenever the term “Plumbing Section” is used in the Memphis & Shelby County Plumbing Code herein adopted, it shall mean the Plumbing Section of the Memphis & Shelby County Office of Construction Code Enforcement.



**ADD or AMEND Section 202 as follows:**

**State of Tennessee Licensed Plumbing Contractor.** Is a Contractor licensed by the State of Tennessee who has received a license from the state of Tennessee with a classification as either CMC or CMC-A.

**State of Tennessee Licensed Mechanical Fire Protection Contractor.** Is a Contractor licensed by the State of Tennessee who has received a license from the state of Tennessee with a classification of CMC-D. This classification as related to the plumbing code will allow the fire protection contractor to permit, install and repair fire protection backflow preventers only.

**Supervision.** Whenever the word “supervision” is used in the Memphis & Shelby County Plumbing Code, herein adopted in reference to a plumbing contractor, the term shall be construed to mean first-hand knowledge of the work being performed by a journeyman plumber or apprentice plumber whose work relies upon the license held by the master plumber and shall include the requirement of active training of the journeyman plumber or apprentice plumber working under the master plumber’s license. It shall further require that the master plumber sign all plumbing permit applications prior to a permit being issued as signifying his or her approval thereof. Before or at the time of inspection of the completed work by the Chief Plumbing Inspector, the master plumber will certify by written affidavit to said Inspector that such work has been satisfactorily completed and will further certify the names of those employees under his supervision upon request.

**AMEND Section 301.6 as follows:**

**301.6 Prohibited Locations.** - Plumbing systems shall not be located in an elevator shaft or in an elevator equipment room.

**Exception:** *Floor drains, sumps and sump pumps shall be permitted at the base of the shaft provided they are indirectly connected to the plumbing system, and that the elevator is not operated by a hydraulic system. Elevators operated by hydraulic systems and that will connect to sanitary plumbing system shall be provided with an oil water separator before connecting to the plumbing system. The oil/water separator shall be sized and designed by a State of Tennessee Licensed and Registered Mechanical Engineer, Shaft drains may be piped or pumped to containment.*

**ADD Section 301.8 as follows:**

**301.8 Workmanship.** -Workmanship shall mean that the plumbing system will be installed uniform in slope, plumb, and level (as required) without stress or strain to piping or structure in a professional manner as required by other sections of the Code.

**AMEND Section 305.6 as follows:**

**305.6 Freezing.** - Water, soil and waste pipes shall not be installed outside of a building, in attics or crawl spaces, concealed in outside walls, or in any other place subjected to freezing temperature unless adequate provision is made to protect such pipes from freezing by insulation or heat, or both. Exterior water supply system piping shall be installed not less than 16 inches below grade.

**EXCEPTION:** Were water piping is located within 18 inches of the outside foundation wall in crawl spaces, the water piping must be freeze protected.

**AMEND Section 305.6.1 as follows:**

**305.6.1 Sewer depth.** - Building sewers that connect to private sewage disposal systems shall be a maximum of 12 inches below finished grade at the point of septic tank connection. Building sewers shall be a minimum of 12 inches below grade.

**AMEND Section 306.1 as follows:**

**306.1 Support of Piping.** - Buried piping shall be supported throughout its entire length. Building drains and building sewers shall not be installed in filled, unstable ground. It shall be the responsibility of the builder to furnish or cause to furnish plumbing contractor with a letter from a certified soil testing company stating that fill is at least 90 percent compacted inside the entire foundation. The plumbing contractor shall forward copy of letter to plumbing official before inspection can be made on underground rough-in.

**Exception:** *Slabs backfilled entirely with compacted sand shall be exempt from said test.*

**AMEND Section 312.1 by adding an Exception that shall read as follows:**

**Exception:** The plastic piping system may be tested with air or as per manufacturer instructions. It is the contractor's sole responsibility to determine which of these two test methods he will conduct.

**AMEND Section 312.5 as follows:**

**312.5 Water Supply System Test.** - Upon completion of a section of or the entire water supply system, the system, or portion completed, shall be tested and proved tight under a water pressure not less than the working pressure of the system; or, for piping systems other than plastic, by an air test of not less than 50 psi. The water utilized for tests shall be obtained from a potable source of supply. The required tests shall be performed in accordance with this section and Section 107.

**DELETE Table [M] 314.2.2 Entitled “Condensate Drain Sizing”**

**DELETE Sections 314.2.1 through 314.2.4 and add the following:**

**314.2.1 Condensation Disposal.** - Condensation from all cooling coils or evaporators may be installed by a mechanical contractor, piped full size from drip pan outlet or outlet supplied by the equipment manufacturer and piped to drain opening provided by plumbing contractor. Plumbing contractor shall provide a trapped indirect waste opening to within two feet of equipment.

**314.2.1.1 Approved Indirect Waste.** - The Mechanical Code shall govern the installation and servicing of condensate, overflow, and flow-down drains from air conditioning, refrigeration, mechanical, and process systems. These shall be connected to the plumbing system through an approved indirect waste receptacle, deep seal trap or through specified fixture traps which shall include: floor drains, standpipe drains, bathtubs and showers.

**314.2.1.2 Drain Line Sizes.** - Condensate drain lines from drip pan outlet may be 3/4-inch minimum with a maximum horizontal run of two feet. Any drain exceeding two feet shall be a minimum of 1¼ inches. All indirect waste fittings shall be DWV fittings installed as per code. For pipe sizing minimums, see Table 314.1.2.

**TABLE 314.1.2  
Condensate Drain Sizing**

<b>Minimum Condensate Pipe Diameters</b>	<b>Equipment Capacity (In Tons of Refrigerant)</b>
1 ¼"	Up to 57
1 ½"	Between 57 and 87
2"	Between more than 87 and 145
2 ½"	Between more than 145 and 260
3"	Between more than 260 and 420
4" 1 % grade	Between more than 420 and 670
4" 2% grade	Between more than 670 and 850

Note: Condensate drains to be vented as in accordance with other sections of the code.

**314.2.1.2.1 Roof Top Units.** - A roof top unit shall not spill onto a roof. It shall connect to a trapped indirect waste opening provided by the plumbing contractor.

**314.2.1.3 Indirect Waste Vent System.** - The maximum length of the indirect waste opening to the vent or vented indirect waste line shall not exceed 25 feet without having to be revented. The vent shall be independent of the sanitary vent system and shall terminate separately through the roof to the open air.

**314.2.1.4 Condensate Connection to the Sanitary Drainage System .** - A Memphis Pattern Deep Seal Trap (see definition of Memphis Pattern Deep Seal Trap), a Deep Seal Trap (see definition of Deep Seal Trap) or catch basin may be used in lieu of an active trap when an active trap cannot be reached by gravity fall.

**314.2.1.5 Residential Condensate.** - The plumbing contractor shall provide an indirect waste opening to within two feet of the unit it serves. This opening must be piped full size (1¼ inch minimum) from an active trap that serves a bathtub, shower, washing machine, or from a 12-inch deep seal trap. This trap shall be located in the heated envelope of the structure and connected to a single vertical vent riser with no other vents connected or horizontal offsets below this point. All indirect waste fittings shall be DWV fittings installed as per Code.

**314.2.1.6 Pumped Condensate.** The mechanical contractor shall connect the HVAC unit to the pump supplied by the plumbing contractor. The plumbing contractor shall hard pipe from the pump discharge and tight connect to an approved trapped opening located as close to the unit as possible. From this point, it shall gravity drain to a suitable location as per other sections of Section 314.

**314.2. 5 Alternate Condensate Disposal.** When the condensate drain(s) can not be connected to the drainage system as determined by the Chief Plumbing Inspector, an alternate method of disposal may be used based on the following limitations:

- i. One to Three Tons cooling units shall drain to a 2' x 2' x 2' pit with gravel and filter cloth.
- ii. Three and one half to five tons cooling units shall drain to a 2' D x 2'W x 10'L trench with 12" of gravel and filter cloth. Four inch diameter perforated pipe shall be placed in the upper portion of the gravel and a stand pipe shall be brought up above the grade of the surrounding area to receive the condensate discharge. (See Fig. 314.2.7)
- iii. Over five tons cooling units shall have the alternate disposal system sized and designed by a registered design professional.

**314.2.6 Modular Buildings.** All modular office buildings, classrooms and homes shall pipe the condensate discharge to an indirect waste receptor or use an alternate method of disposal as per Section 314.2.5 when connection to the sanitary drainage system is not possible.

**AMEND Section 401.2 as follows:**

**401.2 Prohibited fixtures and connections.** – Pan, valve plungers, offset, washout, latrine, frost proof and other water closets having a concealed trap seal or an unventilated space or having walls that are not thoroughly washed at each discharge shall be prohibited. Any water closet that permits siphonage of the contents of the bowl back into the tank shall be prohibited. Trough, floor mounted and waterless urinals shall be prohibited.

**DELETE footnote f Table 403.1**



**AMEND Section 403.3 as follows:**

**403.3 Public (customer) Facilities.** - Customers, patrons and visitors shall be provided with public toilet facilities in structures and tenant spaces intended for public use and utilized as restaurants, nightclubs, places of assembly, business and mercantile occupancies. Public (customer) toilet facilities shall be located on the same floor level, and the path of travel to such facilities shall not exceed a distance of 300 feet. When toilet facilities are located in individual stores, customers shall have direct access to facilities without having to pass through a stock room unless a clear designated path is provided, and that the individual store shall be required to have a drinking fountain in addition to minimum toilet facilities.

**DELETE the phrase “or from the exterior of the building” in Section 403.3.1 so that when amended the section shall read as follows:**

**403.3.1 Access.** The route to the public toilet facilities required by Section 403.3 shall not pass through kitchens, storage rooms or closets. Access to the required facilities shall be from within the building. All routes shall comply with the accessibility requirements of the International Building Code. The public shall have access to required toilet facilities at all time that the building is occupied.

**DELETE Sections 403.3.2 and 403.3.3 and AMEND as follows:**

**403.3.2 Location Of Employee Toilet Facilities In Occupancies Other Than Assembly Or Mercantile.** - Access to toilet facilities in occupancies other than mercantile and assembly occupancies shall be from within the employees’ working area. The required toilet facilities shall be located on each floor of regular work area and the path of travel to such facilities shall not exceed a travel distance of 300 feet. Employee facilities shall be either separate facilities or combined employee and public facilities.

**Exception:** *Facilities that are required for employees in factory, industrial, high hazard, warehouses and storage structures and that are located in adjacent structures under the same ownership, lease or control shall be a maximum travel distance of 500 feet from the employees’ working area. Minimum facilities for office area shall be separate from these areas and determined as per Sections 403.2 and 403.3.*

**403.3.2.1 Location of Employee Toilet Facilities In Mercantile And Assembly Occupancies.** - Employees shall be provided with toilet facilities in building and tenant spaces utilized as restaurants, nightclubs, places of public assembly and mercantile occupancies. The employee facilities shall be either separate facilities or combined employee and public facilities. The path of travel to required facilities shall not exceed a distance of 300 feet.

**Exception:** *Employee toilet facilities shall not be required in tenant spaces of 1,000 square feet or less when the travel distance from the main entrance of the tenant space to a central toilet area does not exceed 300 feet. Such central toilet facilities shall be located on the same floor level as tenant space. Minimum facilities shall be divided equally on each floor.*

**ADD Sections 403.3.3 and 403.3.3.1 through 403.3.3.3 as follows:**

**403.3.3 Location of Facilities In Covered Malls.** In covered malls the required toilet facilities shall meet the requirements of **Table 403.1**. The maximum travel distance of 300' to the central toilet facilities in covered malls shall be measured from the main entrance of any store or tenant space. In covered mall buildings, where employees' toilet facilities are not provided in the individual store, the maximum travel distance of 300' shall be measured from the employees' work area of the store or tenant space

**Exception: Mall Tenant Requirements:**

- A. Spaces under 1,000 square feet are not required to provide toilet facilities within the space if it is within 300 feet of central core facilities.*
- B. Spaces between 1,000 and 2,500 square feet are required to provide at least one handicap accessible, unisex, public restroom within the space.*
- C. Spaces over 2,500 square feet are required to provide a minimum of one men's restroom and one women's restroom. Restrooms are required to be handicap accessible public restrooms.*
- D. Anchor tenants are required to provide facilities to stand on their own.*
- E. Drinking fountains are required in any space which exceeds 1,000 square feet.*

**403.3.3.1 Food Courts Inside Covered Malls.** - Food courts located inside covered malls are not required to have minimum toilet facilities for employees or customers, provided that travel distance from the food court area meets Section 403.6 of this Code.

**403.3.3.2 Restaurants And Nightclubs Inside Covered Malls.** - Restaurants and nightclubs located inside covered malls shall have separate facilities located inside of the restaurant or nightclub. Minimum facilities shall be determined by Table 403.1 of this Code.

**403.3.3.3 Portable Food Carts.** - Portable food carts may be used inside covered malls or other places of business provided that size of portable food cart is no larger than 4 feet by 6 feet with wheels and that it can be moved by one person. Portable food carts with self-contained plumbing shall meet the requirements of the Health Official. The water for storage tanks shall be from a potable source. The wastewater in tank shall be emptied into the nearest service sink.

**ADD Section 403.5 through 403.8 as follows:**

**403.5 Multi-Tenant Office Buildings.** - Common core toilet facilities (separate for males and females) are required for each floor at a rate to be determined by Table 403.1 Business Occupancies. When tenancies, rental units, etc. are to be provided with separate facilities, such facilities are not deductible from the total common core facilities required.

**403.6 Portable Classrooms.** - Portable classrooms that cannot be feasibly connected to the sanitary sewer system shall be located within 300 feet of adequate facilities within the main building, and shall be connected to the main building by a covered walk.

**403.7 Mezzanines.** - Mezzanines intended for human occupancy with office spaces or daily work spaces shall be provided with adequate restroom facilities at that level within a travel distance of 300 feet.

**403.8 Self-Storage Facilities (mini-warehouse) Complex.** - In self-storage (mini-warehouse) complex, facilities shall not be located in each building, but shall be located at the office or entrance, and such that the Code Official determines the intent of the Code has been met.

**AMEND Section 405.3 as follows:**

**405.3 Setting.** - Fixtures shall be set level and in proper alignment with reference to adjacent walls. Floor mounted water closets shall be set on a level floor, and the space between floor and base of bowl shall not exceed 1/4 inch and water closets shall be set as per manufacturer's rough in specifications.

**AMEND Section 405.4.1 as follows:**

**405.4.1 Floor Flanges.** Floor flanges for water closets or similar fixtures shall not be less than 0.125 inch thick for brass, 0.25 inch thick for plastic, and 0.25 inch thick and not less than a 2-inch caulking depth for cast-iron or galvanized malleable iron. Offset closet flanges shall be prohibited except by approval of the Chief Plumbing Inspector.

Floor flanges of hard lead shall weigh not less than 1 pound, 9 ounces and shall be composed of lead alloy with not less than 7.75-percent antimony by weight. Closet screws and bolts shall be of brass. Flanges shall be secured to the building structure with corrosion-resistant screws or bolts.

**AMEND Section 405.8 as follows:**

**405.8 Slip Joint Connections.** - Slip joints shall be made with an approved elastomeric gasket and shall only be installed on the trap outlet, trap inlet and within the trap seal. Fixtures with concealed slip joint connections shall be provided with an access panel or utility space of at least 12 inches in its smallest dimension, or other approved arrangement, so as to provide access to the slip joint connections for inspection and repair. Where such access cannot be provided, all joints are to be soldered, solvent cemented, or screw type so as to form a solid connection. Brass waste and overflows with brass friction rings may also be used. The waste and overflow shall be of straight thru type with overflow connecting to the tee branch which will allow the fixture, drain and trap to be cleaned without disturbance of concealed joints. Connections shall be inspected prior to concealment.

**Exception:** Tubs not having an opening for an overflow shall be piped in such a manner so as to allow the tub waste to be cleared of stoppages.

**ADD Section 406.3**

**Exception:** *The branch drain for residential washing machines is not required to increase to 3-inches when joining with another fixture.*

**AMEND Section 410.1 as follows:**

**410.1 Approval.** - Drinking fountains shall conform to ASME A112.19.1, A112.19.2 or A112.19.9, and water coolers shall conform to ARI 1010. Where water is served and the restaurant seats more than forty (40) customers, drinking fountains shall not be required. Walk in, carry out and fast food restaurants shall be required to have drinking fountain(s). Bottled water is not allowed as substitution for required drinking fountains.

**410.2 Prohibited Location** delete reference to bottled water dispensers.

**ADD Section 411.3 as follows:**

**411.3 Water Supply.** - Cold water only required.

**Add Section 412.2.1 as follows:**

**412.2.1** The floor drain shall have a flanged body with a mechanically fastened clamping collar.

**ADD Section 412.5 as follows:**

**412.5 Other Installations:** Floor drains may be installed in all public toilet rooms, health care, institutional facilities, etc. at the discretion of design engineer. When floor drains are installed in the above mentioned rooms, the floor drains shall be not less than 3 inches and need not be vented when the floor drain trap and fixture drain is sized according to Chapter 9, Section 912. Floor drains are required in boiler rooms as per 2009 IMC section 1004.6, pump rooms and mechanical rooms.

**ADD Section 412.6 through 412.9 as follows:**

**412.6 Prohibited Locations.** - No floor drain or other plumbing fixture except electric water heaters shall be installed in a room containing air-handling machinery when such room is used as a plenum. When rooms are used as a plenum, equipment drains shall be conveyed through an indirect receptor located outside such rooms or other point of disposal.

**412.7 Trench Drains.** - Trench drains shall be made of materials approved by the Chief Plumbing Inspector. Manufactured trench drains shall be sealed according to manufacturer's instructions and shall be tested for seal's integrity with water test.

**412.8 Use of Epoxy In Concrete Trench Drains.** - Trench drains formed in concrete shall use an approved epoxy to treat the concrete. The epoxy shall be applied in accordance with the manufacturer's specifications, with a minimum application of two coats of epoxy.

**412.9 Trench Drains Permitted.** - Trench drains in kitchens or mechanical rooms shall have the bottom surfaces sloped to the waste opening so that no part of the drain will collect debris or waste. The waste opening(s) will have an approved strainer plate as per Section 304.2 of this Code.

**AMEND Section 417.3 as follows:**

**417.3 Shower Waste Outlet.** - Waste outlets serving showers shall be at least 2 inches in diameter: waste outlets in bathtubs shall have removable strainers not less than 3 inches in diameter with strainer openings not less than 0.25 inch in minimum dimension. Where each shower space is not provided with an individual waste outlet, the waste outlet shall be located and the floor pitched so that waste from one shower does not flow over the floor areas serving another shower. Waste outlets shall be fastened to the waste pipe in an approved manner.

**AMEND Section 417.5.2 as follows:**

**417.5.2 Exception:** *Floor surfaces under shower heads for outside rinsing laid directly on ground are not required to comply with this section.*

**ADD to Section 419.1 as follows:**

**419.1 Approval.** - Urinals shall conform to ASME A112.19.2M, CSA B45.1 or CSA B45.5. Urinals shall conform to the water consumption requirements of Section 604.4. Urinals shall conform to the hydraulic performance requirements of ASME A112.19.6, CSA B45.1 or CSA B45.5. Urinals must have integral trap and visible trap seals. Waterless urinals shall be prohibited.

**ADD to Section 419.2 as follows:**

**419.2 Substitution For Water Closets.** - In each bathroom or toilet room, urinals shall not be substituted for more than 67 percent of the required water closets in assembly and educational occupancies. Where only three fixtures are required, two of these must be water closets. Urinals shall not be substitutes for more than 50 percent of the required water closet in all other occupancies.

**ADD Section 423.3 as follows:**

**423.3 Pedicure Tubs. -** Pedicure tubs shall be trapped as a sanitary fixture on gravity drain types. When they have a pump discharge, they must be hard piped to a deep seal trap or washing machine box. When tub filler is below rim, an accessible backflow preventer is required.



**ADD Section 427.2 as follows:**

**427.2 Floor sink installation.** Floor sinks shall be set so that the flood rim of the sink is a minimum of one-half inch to a maximum of one inch above the floor. The floor sink shall not be so located as to create a tripping hazard. .

**ADD Section 502.2.1 as follows:**

**502.2.1 Prohibited Location.** - Fuel-fired water heaters shall not be installed in a sleeping room, bathroom or a closet accessed through a sleeping room or bathroom.

**Exception:** *A sealed combustion chamber or direct vent water heater may be installed in a sleeping room, bathroom or closet accessed through a sleeping room or bathroom.*

**AMEND Section 502.3 as follows:**

**502.3 Water Heaters Installed In Attics.** - Attics containing a water heater shall be provided with an opening and unobstructed passageway large enough to allow removal of the water heater. The passageway shall not be less than 36 inches (91 mm) high and 36 inches (91 mm) wide and not more than 20 feet (6096 mm) in length when measured along the centerline of the passageway from the opening to the water heater. The passageway shall have continuous solid flooring not less than 24 inches (610 mm) wide. A level service space at least 30 inches (762 mm) deep and 30 inches (762 mm) wide shall be present at the front or service side of the water heater. The clear access opening dimensions shall be a minimum of 22 inches by 36 inches (559 mm by 914 mm) where such dimensions are large enough to allow removal of the water heater. If stairs are not available, pull down steps shall be provided.

**ADD Section 502.3.1 and 502.3.2 as follows:**

**502.3.1 Water Heaters Located In Or Over Ceilings.** - All water heaters located in or over ceilings must have permanent access ladder and work platform as per 502.3.2.

**502.3.2 Water Heater Platform** – Where a water heater is placed on a platform directly above a plumbing fixture, the bottom of the platform must be no lower than 6'-8" above the finished floor level. The water heater cannot extend above the ceiling and must be accessible for repairs/or replacement.

**ADD Section 502.5 as follows:**

**502.5 Water Heaters Installed In Garages.** - Water heaters having an ignition source shall be elevated such that the source of ignition is not less than 18 inches above the garage floor. An electric water heater shall be included as having an ignition source. Where an electric water heater is in the garage, it shall be enclosed with a sealed access door or panel large enough to service and remove the heater when the 18 inch height requirement can not be met.

**ADD Section 503.3 as follows:**

**503.3 Water Connections To Water Heaters.** - All water connections to water heaters shall be made with rigid pipe. No flexible connectors may be used.

**AMEND Section 504.7 as follows:**

**504.7 Required Pan.** - Where water heaters or hot water storage tanks are installed in locations where leakage of the tanks or connections will cause damage, the tank or water heater shall be installed in a galvanized steel or other metal pan of equal corrosion resistance, having a minimum thickness of 24 gauge, or other pans approved for such use.

**EXCEPTION:** When a floor drain is installed in the same room with the water heater, a pan will not be required provided the water heater is not elevated and is located in an area served by the drain.

**AMEND Section 504.7.1 as follows:**

**504.7.1 Pan Size And Drain.** - The pan shall be not less than 4 inches deep and shall be of sufficient size and shape to receive all dripping or condensate from the tank or water heater. The pan shall be drained by an indirect waste pipe having a minimum diameter of 1 inch or the outlet diameter of the required relief valve, whichever is larger. When the water heater is installed in the attic, a pan shall not be less than 6 inches deep. Pan-drain piping and T&P valve piping shall be corrosion resistant and have a minimum pressure rating of 100 psi at 180 degree Fahrenheit as per Section 605.5. When multiple pan drains are piped together, the drain pipe from junction to termination will be increased one pipe size for each additional water heater connected to the drain. The maximum number of water heater pan drains shall be limited to four, with the maximum drain being two inches in diameter. Pan drain piping shall be sloped from the pan to the point of termination.

**Exception:** *Gas water heaters with pans of less depth shall have the T&P valve piped separately to a drain or to the outside as per Code. Refer to the local Fuel Gas Code for other requirements.*

**AMEND Section 504.7.2 as follows:**

**504.7.2 Pan Drain Termination.** - The pan drain shall extend full-size and terminate over a suitably located indirect waste receptor, floor drain or extend to the exterior of the building. Pan drains shall terminate not less than 6 inches (152 mm) and no more than 24 inches (610 mm) above the adjacent ground surface. A 90-degree ell turned down must be installed at the termination of the pan drain. The termination must be visible.

**ADD Section 601.2.1. as follows:**

**601.2.1 Water For Air Conditioning And Heat Exchanges, Etc.** - Potable water may be used to furnish water for air conditioning and heat exchanges, etc. only in those cases where efficient evaporation condensers or cooling towers, or other similar devices, are made use of, and where the water thus cooled is recirculated and made use of to the maximum advantage. Potable water system must be protected by an approved reduced pressure backflow preventer.

**AMEND Section 603.1 as follows:**

**603.1 Size of Water Service Pipe.** - The water service pipe shall be sized to supply water to the structure in the quantities and at the pressures required in the Code. The minimum diameter of water service pipe shall be 1 inch.

**ADD Section 603.1.1 as follows**

**603.1.1 PVC Water Service.** - PVC underground water service pipe shall have a minimum wall thickness of SCH. 40 with permanent identification markings. This includes all plastic water service piping listed in Table 605.3.

**ADD Exception to Section 603.2 as follows:**

4. The water service pipe shall be placed on a solid shelf excavated to minimum height of twelve inches above the building sewer and twelve inches to one side of the common trench.

**ADD Footnote b. to Table 604.5**

b. Hose Bibbs: Minimum pipe size shall be ½" diameter and when connecting to branch piping serving other fixtures, the branch shall be a minimum of ¾" in diameter.

**AMEND Section 604.9 as follows:**

**604.9** Add: Access shall be provided to all water hammer arrestors.

**AMEND Section 605.3 as follows:**

**605.3 Water Service Pipe.** - Water service pipe shall conform to NSF 61 and shall conform to one of the standards listed in Table 605.3. All water service pipe or tubing, installed underground and outside of the structure, shall have a minimum working pressure rating of 160 psi at 73.4°F. Where the water pressure exceeds 160 psi, piping material shall have a minimum rated working pressure equal to the highest available pressure. Plastic (PVC) water service piping shall terminate 5' outside the point of entry into a building. All ductile iron water pipe shall be cement mortar lined in accordance with AWWA C104.

**AMEND Table 605.3 as follows:**

**Table 605.3** Delete all reference to Type M copper, WM copper,

**AMEND Table 605.4 as follows:**

**Table 605.4** Delete all reference to Type M or WM copper, Polybutylene.

**AMEND Section 605.9 as follows:**

**605.9 Prohibited Joints And Connections.** Change Note 4 to read:

4. Drilling, tapping, or saddle fittings shall not be permitted in the water distribution system piping except when approved by the Chief Plumbing Inspector.



**Section 605.16.3.1 CPVC threaded transition adapters.** The transition from a threaded pipe or fitting to CPVC pipe shall be done using adapters which have a brass thread insert for female adapters or brass male thread for male adapters.

**EXCEPTION:** CPVC male adaptors may be used at the temperature and pressure relief valve for the water heater

**AMEND Section 606.2 as follows:**

**606.2 Location Of Shutoff Valves.** Each individual fixture shall have an accessible shutoff valve at each outlet that will permit each fixture to be shut off without interfering with the water supply to any other fixtures. The hose bibb or hose connection shutoff valve shall be the only shutoff valve required on washing machine connectors.

**ADD Section 608.1.1 as follows: Separation of underground water piping.**

**608.1.1** Non-potable water piping shall not be piped in the same trench as the potable water piping.

**ADD Section 608.8 as follows: Backflow Preventer Repairs.**

**608.8 Backflow Preventer Repairs.** Double-check and reduced pressure backflow preventers repairs shall be permitted and a test report shall be required.

**AMEND Section 608.14 so when amended it shall read as follows:**

**608.14 Location of Backflow Preventers.** Access shall be provided to backflow preventers as specified by the installation instructions of the approved manufacturer. Double-check and reduced pressure backflow preventers may be installed at a centerline height of two to six feet above finish elevation. Where installation height is above six feet a means of access shall be provided. When installation height is above eight feet a permanent means of access, work area platform and walkway shall be provided.

**AMEND Section 608.15.4.1 as follows:**

**608.15.4.1** Add: All pullout spout type faucets shall be in compliance with CSA CAN/CSA-B125 or have an integral vacuum breaker or vent to atmosphere.

**Section 608.15.4.2 Hose Connections is deleted in its entirety and replaced with the following:**

**608.15.4.2 Hose Connections** – Sillcocks, hose bibs, wall hydrants, faucets and other openings with hose connections shall be protected with an approved manufacturer installed vacuum breaker as part of the faucet and/or hose bib assemblies.

**AMEND Section 608.16.5 as follows:**

**608.16.5 Connections To Lawn Irrigation Systems.** - The potable water supply to lawn irrigation systems shall be protected against backflow by a reduced pressure principle backflow preventer. Lawn irrigation sprinkler lines shall not be piped in the same ditch with any potable water lines.

**ADD Section 608.17.9 as follows:**

**608.17.9 Wells.** - All wells serving irrigation systems shall have a reduced pressure backflow preventer protecting the well from backflow or back pressure. All wells shall be protected against backflow.

**AMEND Section 702.3 as follows:**

**Delete and substitute with the following**

**702.3 Building Sewer Pipe.** -: No building sewer shall be less than 4 inches in size with the exception of forced lines. When plastic pipe is used on lines 4 inches the wall thickness for any size pipe not be less than 0.237". Building sewer pipe shall conform to one of the standard listed in Table 702.3.

**AMEND Section 703.2 as follows:**

**703.2 Drainage Pipe In Filled Ground.** - Where a building sewer or building drain is installed on filled or unstable ground, the drainage pipe shall conform to one of the standards for ABS plastic pipe, cast-iron pipe, copper or copper-alloy tubing, or PVC plastic pipe listed in Table 702.3. Filled ground must comply with 306.1 Amended.



**AMEND Section 708.3.1 and 708.3.2 as follows:**

**708.3.1 Horizontal Drains Within Buildings.** - All horizontal drains 2-1/2 inches and smaller shall be provided with cleanouts located not more than 50 feet apart. For building drains 3 inches and larger, the cleanouts may be 100 feet of developed length apart (from upstream cleanout opening to junction of the next cleanout riser).

**AMEND Section 708.3.2 as follows:**

**708.3.2 Building Sewers.** Building sewers shall be provided with cleanouts located not more than 100 feet apart, measured from the upstream entrance of the cleanout. For building sewers 8 inches and larger, manholes shall be provided at the junction of the building drain and building sewer, at each change in direction and at intervals of not more than 300 feet apart. Manholes and manhole covers shall be of an approved type.

**AMEND Section 708.3.5 as follows:**

Change to read

**708.3.5 Building Drain And Building Sewer Junction.** -: There shall be a cleanout at the junction of building drain and sewer. This cleanout shall be brought to grade level and shall comply in size to Section 708.7. An approved two-way cutout is allowed to be used at this location and serve as both cleanout for building drain and building sewer.

**ADD Section 708.3.7 as follows:**

**708.3.7 Double Sanitary Tee.** - Where double sanitary tee is used for back to back lavatories or sinks, a cleanout will be required in stack to facilitate the cleaning of the sanitary tee.

**AMEND Section 708.4 entitled “Concealed Piping” by deleting the term “24 inches (610 mm)” in the first sentence and replacing it with the term “48 inches (1220 mm)” so that when amended the first sentence shall read as follows:**

**Section 708.4 Concealed Piping.** – Cleanouts on concealed piping or piping under a floor slab or in a crawl space of less than 48 inches (1220mm) in height or a plenum shall be extended through and terminate flush with the finished wall, floor or ground surface or shall be extend to outside of the building .

**AMEND Table 709.1**

**Table 709.1** *Delete:* reference to urinal, nonwater supplied

**ADD Section 710.3 as follows:**

**710.3 Underground Drainage Piping.** - Any portion of the drainage system underground or below a basement or cellar shall be no less than 2 inches in diameter.

**AMEND 712.1 so that when modified it shall read as follows:**

**712.1 Building Drains.** - Building drains that cannot be discharged to the sewer by gravity flow shall be discharged into a tightly covered and vented sump from which the liquid shall be lifted and discharged into the building gravity drainage system by automatic pumping equipment or other approved method.

**ADD Section 712.1.2 as follows:**

**712.1.2 Individual Fixture Drains.** Where individual fixtures are to be installed that cannot be discharged to the drainage system by gravity flow in new or existing buildings they shall be discharged into a tightly covered and vented sump from which the liquid shall be lifted and discharged into the building gravity drainage system by automatic pumping equipment or other approved method.

**AMEND Section 712.4 entitled “Sewage pumps and sewage injectors” by adding two sentences at the end of the section so that when modified it shall read as follows:**

**712.4 Sewage pumps and sewage injectors.** A sewage pump or sewage ejector shall automatically discharge the contents of the sump to the building drainage system. All residential dwellings requiring a sewage pump or sewage injector shall be equipped with a duplex system with alternating pumps and manufactured approved alarms. All commercial and industrial installations must be engineered and pre-approved before commencing of work.

**AMEND 712.4.1 as follows:**

**712.4.1 Macerating Toilet Systems.** - Omit in its entirety.

**AMEND 712.4.2 by deletion of the second exception without replacement .**

**ADD Section 713.7.3 as follows:**

**713.7.3 Dental Vacuum System.** - A dental vacuum system shall waste to a Memphis Pattern deep seal trap with a vent on house side of trap to protect trap seal. This vent shall run independently and terminate through the roof.

**AMEND Section 715.1 entitled “Sewage Backflow” by removing the word “shall” and replacing it with the word “may”**

**ADD Section 715.1.1 as follows:**

**715.1.2 Sewage or Waste Backflow.** - Where deep seal traps are installed below the lowest flood level rims of the building fixtures, a backwater valve shall be required. Access shall be provided to all backwater valves for repair or servicing.

**AMEND Section 802.1.4 entitled “Swimming Pools” so that when modified it shall read as follows:**

**802.1.4 Swimming Pools.** -: See Chapter 16 Amendment and Section 1002.11 Amended.

**AMEND Section 802.1.7 as follows**

**802.1.7 Commercial Dishwashing Machines.** - The discharge from a commercial dishwashing machine shall be hard piped above the floor on a vented grease waste line.

**AMEND Section 903.1 as follows:**

**903.1 Required Vent Extension.** Individual and branch vents serving the building drain or its branches shall extend and terminate 12" above the roof or connect to a stack vent or vent stack.

**AMEND Section 903.3 as follows:**

**903.3 Vent Termination.** Every vent stack or stack vent shall extend outdoors and terminate to the open air above the roof.

**AMEND Section 904.1 as follows:**

**904.1 Roof Extension.** All open vent pipes that extend through a roof shall be terminated at least 12 inches above the roof, except that where a roof is to be used for any purpose other than weather protection, the vent extension shall be run at least 10 feet above the roof.

**AMEND Section 904.6 as follows:**

**904.6 Extension Through The Wall.** - Delete this section in its entirety.

**AMEND Section 905.1 as follows:**

**905.1 Connection.** - All individual, branch and circuit vents shall connect to a vent stack, stack vent, or extend to the open air.

**AMEND Section 906.1 as follows:**

**906.1 Distance of trap from vent.** Delete Exception



**AMEND Section 911.5 as follows:**

**911.5 Additional fixtures.** – Fixtures, other than the circuit-vented fixtures, are permitted to discharge to the horizontal branch drain. Such fixtures shall be located on the same floor as the circuit-vented fixtures, connect horizontally and shall be either individually or common vented.

**AMEND Section 1002.1 as follows:**

**1002.1 Fixture Traps.** Each plumbing fixture shall be separately trapped by a liquid-seal trap, except as otherwise permitted by this code. The vertical distance from the fixture outlet to the trap weir shall not exceed 24 inches. The horizontal distance shall not exceed 30 inches measured from the centerline of the fixture outlet to the centerline of the inlet of the trap. An upright tee with a cleanout in the top above the trap inlet will be required to receive the horizontal portion of the drain into the trap inlet. The height of a clothes washer standpipe above the trap shall conform to section 802.4. A fixture shall not be double trapped.

**AMEND Section 1002.4 as follows:**

**1002.4 Trap Seals.** - Each fixture trap shall have a liquid seal of not less than 2 inches and not more than 4 inches, or deeper for special designs relating to accessible fixtures. Where a trap seal is subject to loss by evaporation, a trap seal primer valve shall be installed. A trap seal primer valve shall conform to ASSE 1018 or ASSE 1044. In lieu of trap primer, trap can be 12 inches deep or must be on an indirect system. All trap primers must have ready access as that term is defined in Chapter 2 of this Code.” at the end of the Section.

**Exception:** Emergency floor drains serving water heaters shall be primed by means of a trap primer or as an indirect receptor with the indirect waste drain connected above the trap seal.

**ADD Section 1002.11 as follows:**

**1002.11 Residential Swimming Pool Traps.** - All swimming pools are required to have drain provisions into the sanitary sewer. It shall be made through an indirect connection by the use of a 12” deep seal trap. It shall be located within the distance as specified **Section 906.1** of a vented sewer. When the sanitary drain is a minimum of 4 inches or the drain is run to the sewer in front of the house, you may install the deep seal trap without any additional requirements. If the sanitary drain is 3 inches, you may install the deep seal trap on the rear of the house provided the following conditions are met:

1. Building drain cleanout shall be located at or below grade.
2. Maximum size of filter shall not exceed 24 inches in diameter.
3. A backwater valve shall be furnished in the 2-inch line near the point of connection to the 3-inch building drain cleanout when required.
4. All work shall be permitted and installed by a Licensed and Bonded Plumbing Contractor.
5. If a problem does arise with the waste piping within the residence caused by the backwash cycle, the Pool Contractor will be responsible for resolving the problem.

**ADD Section 1003.2.1 through 1003.2.8 as follows:**

**1003.2.1** Interceptors constructed of concrete shall have a minimum of 2 feet width inside diameter. The depth of interceptors shall not be less than 24 inches from the top of the backwater valve to the bottom of the interceptor.

**1003.2.2** Interceptors constructed of concrete must have 6 inch walls and 6 inch bottom; walls and bottom must be poured at the same time to make interceptors watertight, shall be located in properly lighted and ventilated space, shall not be located in any unventilated space, and shall not be located in any unventilated storeroom or closet.

**1003.2.3** Interceptors located inside a building must have a ring with an airtight cover. When interceptors are located outside a building at a sufficient distance from a window, etc., the cover need not be airtight. Grease interceptors shall be of thoroughly watertight construction.

**1003.2.4** All concrete interceptors must have not less than a 3 inch minimum outlet to the main waste line. The outlet from the interceptors to the main waste line must have two 3 inch 1/4 bends to make a trap with a 3-inch combination Y – 1/8 inch bend for a cleanout. The backwater valve, when required, shall be in accordance with the provisions of Section 800 of the Technical Codes. All lines from fixtures discharging into grease interceptors must be submerged with sanitary tees and a piece of pipe at least 6 inches below the surface of the liquid in the interceptor. Any main lines or laterals discharging into grease interceptors will be classed as indirect lines.

**1003.2.5** Any main line running into grease interceptors must be vented as per Chapter 9. Any lateral from main vent line shall be sized and vented as per other sections of the Technical Codes. All fixtures must be separately trapped. All lines must have cleanouts as per Chapter 7 and at change in direction, and also, at end of lines at fixture openings. All indirect lines under earth or concrete must be of materials as approved in other sections of the Technical Codes. No indirect vent will be permitted to connect into a sanitary vent.

**1003.2.6** When interceptor is connected to and within the distance as specified Section 906.1 of a vented waste line, no vent is required for the interceptor.

**1003.2.7** Area drains for garbage dumpsters may be connected to catch basin, provided that area has curbing to prevent rain water from outside of curbed area entering area drain.

**1003.2.8** Dishwashing machines in commercial buildings must discharge into a grease interceptor. Other methods if installation may be approved by the Chief Plumbing Inspector.

**ADD Section 1003.3.1.1, Items A, B, and C as follows:**

**1003.3.1.1 Food Service Establishment (Grease Trap) Regulation.**

- A. Grease trap required: All food service establishments discharging wastewater to the City's wastewater facilities shall install, operate, and maintain a sufficiently sized oil and grease, water and solids separator (hereinafter called grease trap) necessary to achieve and maintain compliance to the City of Memphis Sewer Use Ordinance.
- B. Design criteria: All grease traps used in conjunction with food service establishments shall have the capacity of 15 gallons per seat, except that no single grease trap shall be smaller than 750 gallons or larger than 3,000 gallons. In certain cases, multiple grease traps may be utilized if approved through the Division of Public Works. Alternative treatment technologies will be considered on a case-by-case basis for food establishments that are to be located in an existing building where a large grease trap is not feasible. In all other establishments, the requirements shall be as follows:
  - 1. Fixture 40 lb. – 20GPM
  - 2. Fixture 50 lb. – 25GPM
  - 3. Fixture 70 lb. – 35GPM
  - 4. Fixture 100 lb. – 50GPM
  - 5. Local waste management areas shall have final determination of grease trap and interceptor sizing.
- C. Interceptors placed above floor level: When the above floor installation of an interceptor could become an obstruction, or could create a potential unsanitary condition by making it impractical to thoroughly clean around the interceptor, the interceptor should be installed below floor level. If installation below floor level is required, the top is to be placed flush with the floor level and made accessible for cleaning purposes.

**Also refer to sections 1508.3.1 through 1508.3.9**

**AMEND Section 1003.3.2 so that when modified it shall read as follows:**

**1003.3.2 Food Waste Grinders.** Where food waste grinders connect to grease interceptors, a solids interceptor shall separate the discharge before connecting to the grease interceptor. Where food waste grinders are 1-1/4 HP or larger and are used in medium to heavy commercial applications, a solids interceptor shall separate the discharge before connecting to a 1000 gallon or larger grease interceptor. Solids interceptors and grease interceptors shall be sized and rated for the discharge of the food waste grinder. Emulsifiers, chemicals enzymes and bacteria shall not discharge into the food waste grinder.

**ADD Section 1003.3.2.1 entitled “Food Waste Pulper” as follows:**

**1003.3.2.1 Food Waste Pulpers.** Food waste pulpers shall be piped to a solids interceptor before going to the grease interceptor unless approved by chief plumbing inspector.

**DELETE Section 1101.2 entirely and substitute the follows:**

**1101.2 Where Required.** All roofs, paved areas, yards, courts and courtyards shall drain into a separate storm sewer system, or to an approved place of disposal. For one- and two-family dwellings, and where approved, storm water is permitted to discharge onto flat areas, such as streets or lawns, provided that the storm water flows away from the building.

**DELETE Section 1101.9 entirely**

**DELETE Section 1103 entirely and replace it with the word “Reserved**

**1103 Reserved**

**DELETE Section 1104.2 entirely and replace it with the word “Reserved” :**

**1104.2 Reserved**

**AMEND 1104.3 FLOOR DRAINS**

**1104.3 Floor Drains.** Floor drains not serving as an area drains shall not be permitted to connect to a storm drain.

**AMEND Section 1107.2 as follows:**

**1107.2 Separate Systems Required.** Secondary roof drain systems shall have the end point of discharge separate from the primary system. Discharge shall be above grade, in a location that would normally be observed by the building occupants or maintenance personal and in no case shall the discharge be spilled on to a pedestrian area or walkway so as to create a nuisance or hazard.

**DELETE Section 1108 entitled “Combined Sanitary And Storm System” entirely and replace it with the word “Reserved” :**

**1108 - Reserved**



**AMEND Section 1113.2 entitled “Sump pit” by adding an Exception which shall read as follows:**

***Exception:*** In one- and two-family dwellings, a full port valve and a check valve shall be required, located on the discharge piping from the pump or ejector.

**ADD Chapter 14 as follows:**

**CHAPTER 14**

**TRAVEL TRAILERS AND TRAVEL TRAILER PARKS**

**1401 General.** -The requirements set forth in this chapter shall apply specifically to all new travel trailer parks and to additions to existing parks as herein defined, and are to provide minimum standards for sanitation and plumbing installation within these parks, for the accommodations, use and parking of travel trailers. Plumbing installations in travel trailers shall be installed in accordance with ANSI A119.2, Part I.

**1402 Definitions.** - Definitions contained in Chapter 2 shall also apply to this chapter except where the following special definitions shall apply.

**Air Lock.** A condition where air is trapped in a drain or drain hose and retards or stops the flow of liquid waste or sewage.

**Center.** Center of a manufactured home or travel trailer is the longitudinal center line located midway between the right and the left side.

**Combination Compartment.** A shower stall with or without a door which provides for or includes a water closet. It is sized for occupancy of only one person.

**Department Having Jurisdiction.** The Administrative Authority or other law enforcement agency having jurisdiction over this regulation.

**Dependent Travel Trailer.** A trailer coach not equipped with a water closet.

**Drain Hose.** The approved type hose, flexible and easily detachable, used for connecting the drain outlet to a sewer inlet connection.

**Drain Outlet.** The lowest end of the main drain to which the terminal end of the drain hose is connected.

**Independent Mobile Home or Travel Trailer.** One equipped with a water closet and a bath or shower.

**Inlet Coupling.** The terminal end of the water system to which the water service connection is made. It may be a swivel fitting or threaded pipe end.

**Intermediate Waste Holding Tank.** (Travel trailers only) An enclosed tank for the temporary retention of water-borne waste.

**Length.** The distance measured from the tip of the hitch to the part farthest to the rear of a manufactured home or travel trailer.

**Manufactured Home or Travel Trailer Park.** A site, lot, tract or parcel of land upon which one or more mobile homes or travel trailers is parked for the temporary or permanent use as living quarters of one or more families.

**Park Drainage System.** The entire system of drainage piping used to convey sewage or other wastes from the manufactured home or travel trailer drain outlet connection, at its connection to the manufactured home or travel trailer site, to a public sewer or private sewage disposal system.

**Park Water Supply System.** All of the water supply piping within the park, extending from the main public supply or other source of supply to, but not including, the manufactured home or travel trailer service system, and including branch service lines, fixture devices, service buildings and appurtenances thereto.

**Service Building.** A building housing toilet and bathing facilities for men and women, with laundry facilities.

**Sewer Lateral.** That portion of the park drainage system extending to a manufactured home or travel trailer site.

**Travel Trailer.** A vehicular, portable structure built on a chassis, designed to be used as a temporary dwelling for travel, recreational and vacation uses, permanently identified "Travel Trailer" by the manufacturer on the trailer and, when factory equipped for the road, having a body width not exceeding 8 feet and being of any length provided its gross weight does not exceed 4,500 pounds, or being of any weight provided its overall length does not exceed 29 feet.

**Travel Trailer Sanitary Service Station.** One used for emptying waste hold tanks.

### **1403 General Regulations**

**1403.1 Governing Provisions.** - The general provisions of the Plumbing Code shall govern the installation of plumbing systems in travel trailer parks, except where special conditions or construction are specifically defined in this chapter.

#### **1403.2 Travel Trailer Sites**

**1403.2.1** Travel trailers shall not hereafter be parked in any travel trailer park unless there are provided plumbing and sanitation facilities installed and maintained in conformity with these regulations. Every travel trailer shall provide a gastight and watertight connection for sewage disposal which shall be connected to the underground sewage collection system discharging into a public or private disposal system.

**1403.2.2** No dependent travel trailer shall be parked at any time in a space designed and designated for an independent travel trailer unless public toilet and bath facilities are available within 200 feet of the dependent travel trailer. One dump station shall be provided for every 15 trailer sites. The dump station shall be a covered receptor, provided with a water supply which shall be protected against backflow and freezing conditions. This water outlet will be used for cleaning purposes only. This water supply shall not be used to replenish any drinking water tanks.

**1404 Plans And Specifications.** - The owner or operator of every travel trailer park, before providing areas of space for the use and accommodation of independent travel trailers, shall make application for a permit and file two sets of plans and specifications with the Building Inspection Department. The plans and specifications shall be in detail as follows:

1. A scaled plot plan of the park, indicating the spaces, area, or portion of the park for the parking of independent travel trailers and independent trailers.
2. Size, location and specification of the park drainage system.
3. Size, location and specification of water supply lines and their location.
4. Size, location and layout of service building.
5. Size, location, specification and layout of the fire protection system.
6. A scaled layout of typical trailer sites.
7. Applications shall bear the approval of the local enforcement agencies as to

compliance with city or county plumbing, zoning, and health ordinances.

8. Plumbing required by this article shall comply with all city or county plumbing and health ordinances and regulations.
9. The issuance of a permit shall not constitute approval of any violation of this article or of any city or county ordinance or regulation.
10. An approved set of plans and a copy of the permit shall be kept on the park premises until the final inspection has been made.

### **1405 Service Buildings**

#### **1405.1 Minimum Facilities**

**1405.1.1** Each travel trailer park shall have at least one service building to provide necessary sanitation and laundry facilities. Those parks serving independent travel trailers need provide only minimum facilities.

**1405.1.2** The service building shall be of permanent construction with an interior finish of moisture resistant material which will stand frequent washing and cleaning, and the building shall be well lighted and ventilated at all times.

**1405.2 Independent Trailers.** -The service buildings of only independent travel trailer parks shall have a minimum of one laundry tray, one water closet, one lavatory, one shower or bathtub for women and one water closet, one lavatory, and one shower or bathtub for men.

**1405.3 Dependent Trailers.** -The service buildings in parks that also accommodate dependent travel trailers shall have a minimum of one laundry tray, two water closets, one lavatory, one shower or bathtub for women, and one water closet, one urinal, one shower or bathtub for men. The above facilities are for a maximum of ten dependent travel trailers. For every ten additional dependent travel trailers, the following additional fixtures shall be provided: One laundry and one shower or bathtub for each sex, one water closet for every 10 additional dependent travel trailers for women and one water closet for every 15 additional dependent travel trailers for men.

#### **1405.4 Water Supply For Fixtures**

**1405.4.1** Hot and cold water shall be provided for all fixtures except water closets. The slop-water closet shall be provided with hot and cold water faucets over the bowl in addition to the flushing mechanism (preferably a flushometer valve).

**1405.4.2** Each water closet, slop-water closet, tub and shower shall be in separate compartments, with self-closing doors on all water closet compartments. The shower stall shall be a minimum of 3x3 feet in area, with a dressing compartment with a stool or bench for women.

**1405.5 Floor Drains.** -A minimum 3-inch floor drain shall be installed in each toilet room and laundry room.

**1406 Materials.** - Unless otherwise provided for in this chapter, all piping fixtures or devices used in the installation of drainage and water supply systems for travel trailer parks, or part thereof, shall conform to the quality and weights of materials required by the Standard Plumbing Code.

**1407 General Regulations.** - Unless otherwise provided for in this chapter, all plumbing fixtures, piping, drains, appurtenances and appliances designed and used in park drainage, water supply system and service connections shall be installed in conformance with the Plumbing Code.

#### **1408 Park Drainage System**

**1408.1** The main sewer and sewer laterals shall be installed in a separate trench not less than 5 feet from the park water service or distribution system. (See 608.3)

**1408.2** The minimum size of pipe in any travel trailer park drainage system shall be 4 inches.

**1408.3** Each travel trailer shall be considered as six fixture units in determining discharge requirements in the design of park drainage and sewage disposal systems.

**1408.4** Minimum grade for sewers shall be so designed that the flow will have a mean velocity of 2 feet per second when the pipe is flowing half full.

**1408.5** The discharge of a park drainage system shall be connected to a public sewer. Where a public sewer is not available, an individual sewage disposal system shall be installed, of a type that is acceptable and approved by the administrative authority or other

law enforcement agency having jurisdiction over this regulation.

**1408.6** Manholes and cleanouts shall be provided as required in Chapter 7. Manholes and cleanouts shall be accessible and brought to grade.

**1408.7** The main sewer shall be provided with a minimum 3-inch vent, not more than 5 feet downstream from its upper trap. Long mains shall be provided with additional relief vents at intervals of not more than 200 feet thereafter, if the manhole covers are not of perforated type. These relief vents shall be a minimum of 3 inches and shall be securely supported and extended a minimum of 10 feet above the ground.

**1408.8** Branch lines or sewer laterals to individual travel trailers shall not be less than 3-inch diameter.

**1408.9** Sewer inlets shall be a minimum of 3-inch diameter and extend above grade 3 to 6 inches. Each inlet shall be provided with a gas-tight seal when connected to a trailer and have a gas-tight seal plug for use when not in service.

**1408.10** Each trailer site shall be provided with a house trap. Sewer laterals over 30 feet from the main park drainage sewer shall be properly vented and provided with a cleanout brought to grade.

**1408.11** To provide the shortest possible drain connection between the travel trailer outlet and drain inlet, all drain inlets shall terminate with reference to the site location of the travel trailer.

**1408.12** Drain connection shall slope continuously downward and form no traps. All pipe joints and connections shall be installed and maintained gastight and watertight.

**1408.13** No sewage, waste water, or any other effluent shall be allowed to be deposited on the surface of the ground.

**1408.14** Upon completion and before covering, the park drainage system shall be subjected to a static water test. The water tests shall be applied to the drainage system either in its entirety or in sections. If applied to the entire system, all openings in the piping shall be tightly closed, except the highest opening; and the system shall be filled with water to point of overflow. If the system is tested in sections, each opening shall be tightly plugged except the highest opening of the section under test, and each section shall be filled with water; but no section shall be tested with less than a 10-foot head of water. In testing successive sections, at least the upper 10 feet of the next preceding section shall be tested so that no joint or pipe in the system shall have been submitted to a test of less than a 10 foot head of water. The water shall be kept in the system, or in the portion under test, for at least 15 minutes before inspection starts; the system shall then be tight at all points.

#### **1409 Water Distribution System**

**1409.1 General.** - Every travel trailer site shall be provided with an individual branch service line delivering safe, pure, and potable water. The outlet of the branch service line shall terminate on the left side of the site of the travel trailer.

**1409.2 Minimum Size.** -Water service lines to each trailer site shall be sized to provide a minimum of 8 GPM at the point of connection with the trailer distribution system.

#### **1409.3 Backflow And Service Shutoff**

**1409.3.1** A backpressure backflow preventer or reduced pressure principle backflow preventer shall be installed on the branch service line to each independent trailer at, or near, the trailer service connection. Backflow preventive devices shall be of an approved type certified by a recognized testing agency as to compliance and performance outlined herein. Valves shall be designed and maintained to close drip-tight at a reduced pressure of not less than

1 or more than 5 psi. Backflow preventers shall be installed as per manufacturer's installation recommendations. All backflow preventers shall be protected from freezing and damage. Backflow preventers must be identified with the manufacturer's name and model number.

**1409.3.2** A separate service shutoff valve shall be installed in each branch service line on the supply to the backflow protective device.

**1409.4 Service connections.** - The service connection shall be not less than 3/4-inch diameter; no rigid pipe may be used. Flexible metal tubing is permitted. Fittings at either end shall be of a quick disconnect type not requiring any special tools or knowledge to install or remove.

#### **1410 Travel Trailer Connections**

**1410.1 Responsibility.** - When it is evident that there exists, or may exist, a violation of these rules, the owner, operator, lessee, person in charge of the park, or any other person causing a violation shall cause it to be corrected immediately or disconnect the service connection and travel trailer drain connection from the respective park branch service line and sewer lateral.

**1410.2 Drain Connections.** - Travel trailer drain connections shall be of approved semi-rigid or flexible reinforced hose having smooth interior surfaces of not less than 3 inches inside diameter. Drain connections shall be equipped with a standard quick disconnect screw or clamp type fitting, not less in size than the outlet. Drain connections shall be gastight and no longer than necessary to make the connection between the travel trailer outlet and the trap inlet on the site.

**1411 Maintenance.** - All devices or safeguards required by this chapter shall be maintained in good working order by the owner, operator, or lessee of the travel trailer park or his designated agent

**ADD Chapter 15 entitled “Special Regulations” as follows:**

**CHAPTER 15  
SPECIAL REGULATIONS**

**1501 Required Water And Sewer Connections.**

**1501.1** All buildings located within the jurisdiction of the Technical Codes, and upon a public thoroughfare, street, alley, or place where service from the public main or public sewer can be obtained, shall be provided with sewer and water line facilities as provided by the Technical Codes; and connections shall be made to the public water mains or public sewers.

**1501.2** Whenever a public sanitary sewerage or water system is extended and made available to any park, section plot, lot, or premise, it shall be the duty of every person, owner or occupant, or responsible person at whose premise the facilities are available, to connect all plumbing facilities to the sanitary sewerage system and water system. Time allowed to connect to the sewer system is 12 months if no outcropping occurs. If the condition is declared a nuisance, it must be abated immediately. Time allowed to connect to the public water system is 12 months provided the private water supply is a safe supply.

**1501.3** Every building facing a dedicated public thoroughfare, street, or alley shall have a separate connection with the public sewer. This connection shall service only such other appurtenance buildings as a servant's house, private garage, or private workshop that are erected for the use of the occupants of the initial building.

**1501.4** One connection to the public main sewer will be allowed for a building generally constructed as a unit under one roof, except as herein expressly prohibited.

**1502 Sewer and Drains, Generally**

**1502.1 General Duty Of Public Officers Relative To Sewers And Drains.** -The proper officers and authorities shall, to the extent to their power and ability, cause the sewers and drains to be so well designated, located, and constructed, and to be so kept in repair and cleaned, and so adequately supplied with water, that life and health shall not be needlessly exposed or suffer unnecessary peril or detriment by their neglect, or by reasons of their defects or deficiencies of any sewers or drains, or the want thereof.

**1502.2 Sufficient Water To Be Used To Flush**

**Sewers.** - It shall be the duty of all boards, departments, officers, and persons having power of authority to require, and to the extent thereof, to cause to be used sufficient water, and other adequate means to be taken, so that whatsoever substances may enter any sewer shall pass speedily along from the same, and sufficiently far into some water or proper reservoir so that no accumulation shall take place that will be dangerous or prejudicial to life or health.

**1502.3 Uncovering Sewers: Sewer Connections**

**Generally.** - It shall be a civil offense and violation of this code for any person to uncover any public sewer for any purpose or make connections therewith, or uncover the public connections thereof, unless and except by the consent and under the supervision of the public engineer or his duly authorized agent or agents, whose duty it shall be to ensure full compliance with the regulations in relation to connections.

**1502.4 Sewer Connections.** - All connections to the public sewers shall be made by public forces or by a contractor's forces employed by the public and under public supervision. There shall be no transfer of fee for sewer connection application.

If the sewer connection has not been installed, a refund may be requested by letter, enclosing the original receipt or affidavit stating the receipt has been lost.

**1502.5 Extension Of Sewer Lines.** -Sewer lines to serve new buildings shall not be extended by the local governing body further than 100 feet for each building served by such extension, unless after special investigation, longer extensions are specifically authorized by the local governing authority.

**1502.6 Code Does Not Require Construction of Sewers.** -The provisions of the Technical Codes shall in no way be construed as requiring the local governing body to construct sewers in streets or alleys or in private property where sewers are not already installed.

**1502.7 Abandonment Of Construction Of Sewer Connection.** - It is unlawful for any person, unless prevented by circumstances over which he has no control, to abandon the construction of any sewer or sewer connection after the work has started, until the same has been constructed according to the permit approved by the Building Official. Allowing the work on any sewer connection to be suspended for 48 hours shall be considered as abandonment.

#### **1502.8 Sewer Obstruction Generally**

**1502.8.1** It shall be the duty of every person using, making or having any drain, soil, pipe, passage or connection between any sanitary or storm sewer on any ground, building, erection or place of business, and in like manner the duty of the tenant or occupant of any premises, and the duty of all boards, departments, officers and employees of the local governing body to cause and require all such pipes and connections to be adequate for the purposes and uses to which they are to be put and kept, and shall convey and allow freely to enter and pass through whatever enters or should enter therein.

**1502.8.2** All obstructions in such parts of the sanitary or storm sewer systems as lie within the public streets or places shall be promptly removed by the local governing body under the direction and supervision of the Engineering Department.

**1502.8.3** All obstructions in any private drain or sewer, or any pipes leading into any public sanitary or storm sewer, or connection therein, within private property lines shall be promptly removed by the owner, tenant or occupant of such premises, subject to the direction of the Engineering Department.

**1502.9 Deposit Of Garbage, Hair, Ashes, Etc. In Sewers.** - Except as expressly provided by the condition prescribed in the Technical Codes, it shall be a civil offense and violation of this code to throw or deposit, or cause or permit to be thrown or deposited in any vessel or receptacle connected with a public sewer, any garbage, hair, ashes, fruit or vegetables, peeling or refuse, rags, cotton, cinders, or any other matter or thing whatsoever, except feces, urine, the necessary closet paper and liquid house slops. It is hereby made the duty of all citizens to aid the police in bringing offenders against this Section to punishment and also to prevent breaches of the same.

**1502.10 Surface Or Rainwater Not To Enter Sanitary Sewers.** - Surface or rainwater from the ground or roofs of buildings shall not be allowed to enter any sanitary sewer, or any vessel or slop sink

connected with such sewer, providing that drainage of basements may be provided in accordance with the regulations of the Technical Code.

**1502.11 Discharge Of Sewage Into Rivers And Streams Prohibited.** - No private drains or sewers from any point to any river or stream shall be allowed, and no private discharge of water, sewage, or liquid or semi-liquid waste from factories or places of business shall be discharged from private pipes or sewers into any of said rivers, either directly or indirectly.

**1502.12 Sewer Connections In New Subdivisions.** -The Master Plumber must have the approval of the Public Engineering Department before the house sewer can connect to the public sewer. If the Master Plumber permits any person to remove the plug from the public sewer connection at the property line without his permission, he must assume all responsibility for refuse causing obstruction of the public sewerage system. No inspection will be made until approved by the Public Engineering Department.

**1502.13 First Use Of Existing Sanitary Sewer Connection.** When a sewer connection has been previously installed prior to construction of a building, the plumber is required to contact the Public Sewer Department and obtain information as to location and depth, and to lay out his work to fit this location. The plumber's failure to make this inquiry will not constitute a cause for the public forces to do any additional work in the sewer connection. The local governing body will not be liable for any expense that the plumber may encounter because of his failure to inquire. If, after paying a standard fee, the plumber finds upon exposing the connection that the connection is not usable, the Public Sewer Department will do whatever work that is needed to make the connection usable, except where the following conditions are present:

**1502.13.1** Building constructed at a greater distance from the street than the prevailing setback requires at that location.

**1502.13.2** Basement drain desired by owner.

**1502.13.3** Split-level house construction.

**1502.13.4** Other condition requiring extra depth.

**1502.13.5** If any of these conditions are present and they require additional work on the existing sewer connection, the cost of this additional work will be charged against the plumber. The local governing body reserves the right to refuse gravity sewer service to buildings constructed out of the ordinary when the cost of providing this service is deemed prohibitive by the local governing body.

**1502.14 Additional Sanitary Sewer Connection to Same Lot.** - The local governing body will do all that it can, within reason, to provide a standard sanitary sewer connection to each subdivided residential lot. Second or additional standard connections must be classed as “special sewer connections.” The charge to the plumber will be a fee affixed by the local governing body for each additional 6 inches standard sewer connection to the same lot.

**1502.15 Commercial Lots.** - The number of standard sewer connections will not be limited. The plumber will be charged for a standard sewer connection for each unit of commercial building as defined in the Technical Codes. If unusual conditions are present, the Chief Plumbing Inspector, after contacting the Engineering Department to determine if unusual conditions are present, may grant a reasonable variation in writing. The Engineering Department will have the authority to determine if conditions justify a special sewer connection and a special charge to the plumber.

**1502.16 Apartment Developments.** - On lots occupied by more than one apartment building, a standard sewer connection much be charged against the plumber for each connection installed. Such connections must conform to requirements on the plumbing plans that have been approved by the Chief Plumbing Inspector. The Engineering Department will have the authority to determine if conditions justify a special sewer connection and a special charge to the plumber.

**1502.17 Industrial Property.** - On industrial property the number of standard sewer connections will not be limited, provided not more than one standard 6 inch sewer connection is required for each building. When more than one connection is required for the same building, the plumber will be charged a fee affixed by the local governing body for each additional standard sewer connection. The Engineering Department will have the authority to determine if conditions justify special sewer connections and a special charge to the plumber.

**1502.18 Free Connections.** - No free connection can be granted by the local governing body except by

written authority of its Mayor. Connections granted by the local governing body as consideration for ease and right-of-way must be honored by the OCCE only when the plumber can furnish the owner’s copy of the agreement.

**1502.19 Unauthorized Sewer Connections.** - No person shall connect sewer lines within property with the public sewer mains, submains or laterals, except in the manner provided in the Technical Codes, and any person violating the provisions of the Technical Codes and making an unauthorized connection shall be guilty of a civil offense and violation of this code.

### **1503 Abandoned Wells and Cisterns**

**1503.1** When water connections are made to a public water system, the abandoned well shall be filled, as required by the Memphis and Shelby County Health Department.

**1503.2** The Memphis and Shelby County Health Department shall require all old and abandoned wells and cisterns to be filled as soon as possible.

**1503.3** See other requirements at Section 1501.2.

### **1504 Septic System Installer Regulations**

**1504.1** The term “septic system installer” as used in the Technical Codes is defined to include any person having the general charge and supervision of the business of installing septic tanks and disposal fields or disposal lagoons.

**1504.2** Every licensed septic system installer doing business shall give a bond in the penalty of \$5,000 with a surety company licensed as approved by the Legal Department. Said bond shall be payable to the local governing body for the use of the local governing body and any citizen who may be damaged by the failure of such licensed septic system installer to comply strictly with the Technical Codes or who may be damaged by any negligence committed to imperfect work done by such licensed septic system installer and such bond shall be so conditioned as to require said drainage and excavation and conditioned as to require such licensed septic system installer to indemnify and hold harmless the local governing body and all persons from damages caused by the negligence or inadequate work done by such septic system employees and agents. The bond shall further provide that any person injured by the default of the licensed septic system installer shall have the right to bring suit directly against the surety on the bond. Said bond shall be renewed once per year. If the



security should become impaired before the expiration of any bond, the Administrator of the OCCE shall require that a new bond be given immediately.

### **1505 Septic Cleaner Regulations**

**1505.1** The term “septic cleaner” as used in the Technical Codes is defined to include any person having the general charge and supervision of the business of cleaning and pumping out septic tanks, chemical toilets, disposal fields, catch basins, grease traps, or similar plumbing receptacles.

**1505.2** Any application for licensing as a septic cleaner must be accompanied by a report of approval by the Memphis and Shelby County Health Department of the applicant’s ability, equipment, and proposed method of operation of a septic cleaning business. Such application and report shall be made under oath and shall require the applicant to agree to observe all valid state and local laws and regulations that have a bearing upon the septic cleaning business. Applicant shall arrange with the Health Department for such inspections of equipment and business operations as may be required.

**1505.3** If any applicant for licensing as a septic cleaner is to be qualified for such license by the Joint Plumbing Licensing Board and the Memphis and Shelby County Health Department, he shall be issued a 94 D septic cleaner license after payment of an annual dumping fee of \$200 per truck. Failure to renew septic cleaner license and to pay the annual truck dumping fee within the 30-day period following expiration shall require the person to reapply to the Joint Plumbing Licensing Board and the Memphis and Shelby County Health Department.

**1505.4** Septic cleaner trucks shall be constructed and maintained in a sanitary condition at all times, and all septic cleaning equipment shall be operated in a sanitary manner, in accordance with the requirements of the Memphis and Shelby County Health Department.

**1505.5** Each truck shall be properly identified with the septic cleaner’s name, address, and license number and the fee number of the truck.

**1505.6** Sanitary conditions shall be maintained at all times while working on any premises, transporting, disposing, or storing equipment used in the septic cleaning business, and all places affected by such work shall be left in a sanitary condition.

**1505.7** Waste disposal from septic tanks, chemical toilets, and disposal fields shall be delivered to designate sewer manholes for disposal (said manholes to be designated by the local governing body). Waste from catch basins, grease traps or similar plumbing receptacles shall be delivered to designated landfills, or as otherwise required and in the manner prescribed by the Memphis and Shelby County Health Department and local governing body. No industrial waste may be picked up for disposal unless the industry producing the waste has a letter of approval from the Environmental Control Department and the Health Department having jurisdiction.

**1505.8** The Chief Plumbing Inspector shall be notified within 48 hours of the cleaning out of each septic tank and/or disposal field. Violation of disposal requirements will be subject to a fine as provided elsewhere in the Technical Codes.

**1506 Septic Tank Discontinued.** -Where septic tanks are discontinued and plumbing connected to the public sewer, the septic tank shall be pumped out and the waste discharged into the sanitary sewer. The tank shall be filled with clay, dirt, or sand. This shall be done before a final inspection certification is issued.

### **1507 Rules Governing Special Conditions**

**1507.1 Veterinary Clinics.** -Veterinary clinics shall provide a concrete or an impervious floor where dogs are kept. Adequate floor drains, not to exceed 15 feet on centers, shall be provided for areas where dogs are kept. Where the walls are extended to the floor level, a floor drain shall be provided for each stall.

**1507.2 Dog stands, animal, fowl, and pets.** - Where four or more dogs are kept or boarded on a private or public premises or where other animals, fowl or pets are kept or boarded on a private or public premise, the owners shall be required to install a concrete area of at least two hundred (200) square feet with one or more floor drains as indicated in Section 1507.1. All drains shall be connected to the public sewer or to a private disposal system serving that property. A vertical curb shall be made a part of the floor and the curb shall extend six inches above the floor.

**1507.3 Zoological Gardens.** -All waste from the animal pens, fowl stands or racks, fish ponds or containers, and all other waste from zoological gardens shall be connected to the public sewer as directed by the Chief Plumbing Inspector.

## **1508 Rules Governing Conventional Indirect Waste Systems**

**1508.1 Food Equipment.** - Dishwashing and related food equipment, for other than single family dwelling units, shall comply with the requirements of the Memphis and Shelby County Health Department.

**1508.2 Grease Traps Required.** - In all cases where a building is used as a hotel, factory, tenement, boarding home, restaurant, or place where a large amount of cooking is done, all sinks shall be provided with a properly constructed grease trap through which all slop of a greasy nature must be drained. The Chief Plumbing Inspector has authority, and is hereby authorized and directed, to compel any person, firm, or corporation to provide and use a grease trap as aforesaid, wherever in his judgment the same is necessary. All grease traps are to be of metallic, composite or concrete construction to prevent their destruction; such as brass, copper, or cast iron enameled inside.

### **1508.3 Grease Traps Or Interceptors**

**1508.3.1** Grease traps or interceptors of approved design shall be installed for all waste from scullery sinks and dishwashing machines, in every restaurant, lunchroom, kitchen, fat rendering establishments, institutional servicing rooms or kitchens, hotels or clubhouses when, in the opinion of the Building Official, a hazard exists, or any other conditions exist that would affect line stoppage or hinder sewage disposal. This section shall also apply to other establishments where large quantities of greasy wastes are likely to be discharged into the drainage system. Plans and/or specifications for installations of interceptors must be submitted to the Building Official for approval.

**1508.3.2** For sizing and design of grease interceptors, contact the local governing body that has jurisdiction in that area.

**1508.3.3** Interceptors constructed of concrete must have 6-inch walls and 6-inch bottom; walls and bottom must be poured at the same time to make interceptors water tight. Interceptors shall be located in properly lighted and ventilated spaces, and shall not be located in any unventilated spaces, or in any unventilated storerooms or closets.

**1508.3.4** Interceptors located inside a building must have a ring with an airtight cover. When interceptors are located outside a building at a sufficient distance from a window, etc., the cover need not be airtight.

Grease interceptors shall be of thoroughly watertight construction.

**1508.3.5** All concrete interceptors must have not less than a 3-inch minimum outlet to the main waste line. The outlet from the interceptors to the main waste line must have two 1/4 bends to make a trap with a combination Y – 1/8 inch bend for a cleanout. The backwater valve shall be in accordance with the provisions of Section 800 of the Technical Codes. All lines from fixtures discharging into grease interceptors must be submerged with sanitary tees and a piece of pipe at least 6 inches below the surface of the liquid in the interceptor. Any main lines or laterals discharging into grease interceptors will be classed as indirect lines.

**1508.3.6** Any main line running into grease interceptors must be vented as per Chapter 9. Any lateral from main vented line shall be sized and vented as per other sections of the Technical Codes. All fixtures must be separately trapped. All lines must have cleanouts and at changes in direction; also, at end of lines at fixture openings as per section 708. All indirect waste piping shall meet the requirements of Tables 702.1 and 702.2 and any subsequent amendments. No indirect waste vent will be permitted to connect to any sanitary waste vent.

**1508.3.7** When grease interceptor is connected to and within the distance as specified Section 906.1 of a vented waste line, no vent is required for the interceptor.

**1508.3.8** Area drains for garbage dumpsters may be connected to a catch basin, provided the area has curbing to prevent rainwater from beyond the curbed area flowing into the area drain.

**1508.3.9** Dishwashing machines in commercial buildings shall discharge into a grease interceptor or grease trap. Other methods of installation may be approved by the Chief Plumbing Inspector.

**1508.4 Waste Pipes From Drinking Fountains, Refrigerators, Floor Drains, Safe Waste, And Soda Fountains.** - No waste pipe from a refrigerator, ice box, bar fixture, safe waste, soda fountains, or any other receptacle where food is stored shall connect directly with any sanitary waste pipe. The waste piping from six or more waste receptors shall be piped as an indirect system and must be piped to a catch basin or deep seal trap before connecting to the sanitary waste system. The waste piping shall be sized and installed in accordance with tables 702.1, 702.2 and as per sections 802.2, 802.3 and 802.4. Waste piping exceeding 25 feet from the catch basin

or deep seal trap, shall be vented as per sections 916.1 and 916.2, vented through the roof and shall not connect to any soil or waste vent. Cleanouts shall be installed as per section 708, and so arranged as to be properly flushed. A catch basin or deep seal trap not exceeding the distance as specified Section 906.1 from a soil or waste line, which is vented in a method approved as per Chapter 9, may be installed without a vent for same. Drinking fountains may be installed as an indirect or a sanitary fixture. In no case shall an indirect system when connected to a catch basin be installed without at least one indirect vent through roof.

**1508.5 Multiple Compartment Sinks.** - All multiple compartment sinks discharging into a grease trap can be installed with a continuous waste if the farthest connection on the sink is not more than 60 inches from the grease trap. Two and three-compartment sinks allowed on indirect waste line can be installed on one trap, provided the trap is not more than 60 inches from farthest connection on the sink.

**1508.6 Catch Basin Used in Place of Deep Seal Trap.** - A catch basin of concrete may be used in place of a deep seal trap where provided for in Section 1508.4. Such basin shall not have less than 24 inches of sediment depth below the top of the outlet, (see the drawing for a typical catch basin) there shall be a backwater valve at the outlet, two quarter bends shall be so piped to create a trap, and shall have a removable solid iron cover.

#### **1508.7 Catch Basin Construction**

**1508.7.1** Catch basins shall be constructed of concrete with a minimum surface area of at least 4 square feet, and shall be provide with a #6 rim and cover, and properly trapped to prevent the escape of sewer gases. When basin is placed in line of heavy vehicular traffic, a # 7 rim and cover will be required. See "standard catch basin" drawing.

**1508.7.2** Catch basins shall be provided with a backwater or sewer valve. Such valves shall be of a pattern or design to be approved by the Chief Plumbing Inspector and shall have all bearing parts of bronze or other corrosion resistant material. These backwater valves must be accessible.

**1508.8 Catch Basin Location.** - No such catch basins or washstands shall be constructed until the place thereof shall be submitted to, and approved by the Chief Plumbing Inspector, who shall approve no plan which does not adequately provide for the prevention of the entry of mud, surface water, sawdust or other foreign materials into the public

sewer, and which are not adequately provided with vents, traps, and cleanouts.

**1508.9 Vent for Catch Basin.** - No vent shall be required when the catch basin is within the distance as specified Section 906.1 of a soil line which is vented in a method approved as per Chapter 9.

#### **1508.10 Vehicle Wash Stands**

**1508.10.1** Vehicle or automobile wash stands shall be equipped with a double basin, one of which shall be covered with a removable solid iron cover, and the other with a #10 rim and grating.

**1508.10.2** One of said basins shall be connected with the other, and only one shall be connected with the public sewers directly. The basins so connected with public sewers shall be provided with a proper cleanout and be properly trapped and vented so as to prevent the escape of sewer gases. No vent shall be required for the master basin connected directly with the sewer if it is within the distance as specified Section 906.1 of said sewer which is vented in a method approved as per Chapter 9.

**1508.11 Catch Basin Local Vent.** -All catch basins and vehicle wash stands in the public garages, cleaning establishments, or other places where gasoline or other volatile inflammable liquids are used shall be provided with a local vent, which shall be carried above the roof so as to prevent the collection of gases. Such local vents shall not be connected with any other vent.

#### **1508.12 Self-service, Coin-operated, Dry-cleaning and Laundry Establishments**

**1508.12.1** Plumbing installations for laundrettes or washaterias shall be made in accordance with plans and specifications as shown on drawing "typical catch basin or grease trap-minimum." Catch basins, waste and vent lines, and waste connections to the washing machines shall be constructed and connected according to the requirements of the Technical Codes.

**1508.12.2** Washing machines with gravity discharge may drain into a trench drain, provided that drains are installed higher than the finished floor and trench drain is connected in a catch basin. See Sections 412.7 through 412.9 for trench drain construction. This system shall discharge into a concrete catch basin located inside or outside of building, minimum size of the catch basin to be 24 inches square and the bottom of the catch basin to be 24 inches below top of backwater valve. If the catch basin is located outside of building, the top of basin shall be 3 inches above the finish grade, catch basin to have #6 rim and cover.

**1508.12.2.1** One washing machine with a gravity discharge will be permitted to drain into a floor sink of sufficient size to prevent overflow. The floor sink may be job built and must be approved by the Chief Plumbing Inspector. The floor sink may connect to sanitary and shall be vented as per other sections of the Technical Codes.

**1508.12.2.2** Washing machines shall discharge into a collector system of drainage pipe and fitting and have proper vents. This collector system shall discharge into a concrete catch basin located inside or outside of building.

**1508.12.3** Six or less gravity type washing machine waste openings shall be permitted on a 3-inch waste line, more than 6 washing machines waste openings will require a 4-inch waste line. Where ten or more washing machines are to be installed the waste system shall be sized and designed by a State of Tennessee registered engineer.

**1508.12.4** Pump type washing machines shall separately trapped, vented or discharge to a trapped collection header and sized as per other applicable sections of this technical code.

**1508.12.5** Self-service, coin-operated, dry-cleaning establishments, laundrettes and/or washaterias shall be provided with the minimum number of facilities as outlined in the technical code. The toilet facilities and drinking fountain(s) shall be accessible directly to the customer area.

**1508.12.6** Floor drains shall be provided on the basis of one 3-inch drain with an inlet cover of not less than 6 inches in diameter for each 400 square feet of floor area. The inlet cover shall be flush with the floor surface, and floors shall be sloped to drain.

## **1508.13 Other Washing Machines**

**1508.13.1** All washing machines must connect to a deep seal trap or have separate trap and vent as provided for other fixtures.

**1508.13.2** Every private dwelling constructed must have a waste outlet, trap, and hot and cold water faucets left in the plumbing system for an automatic washer or a conventional washer or laundry tub.

**ADD Chapter 16 as follows:**

**CHAPTER 16  
PLUMBING INSTALLATION STANDARDS  
FOR SWIMMING AND WADING POOLS**

**1601 Purpose, Application And Scope.** -The requirements set forth in this appendix shall apply specifically to all public, semi-public, and permanent private swimming pools and wading pools and are to provide minimum standards for sanitation and plumbing installation for swimming and wading pools.

**1602 Construction and Maintenance, Generally**

**1602.1** Every pool shall be so designed and constructed as to facilitate cleaning and shall be maintained and operated in such manner as to be clean and sanitary at all times.

**1602.2** Inlets and outlets shall be located and spaced so as to secure satisfactory dispersion of the inflowing water throughout.

**1602.3** All pools shall have the bottom and inner sides constructed of smooth nonabsorbent materials and to be so constructed as to be properly drained.

**1603 Waste Water Disposal, Generally**

**1603.1** All waste water from public, semi-public, or permanent private swimming pools and wading pools shall have an indirect connection to the sanitary plumbing when connected to the public sewer and/or such connections and type of disposal shall be as determined by the Health Department when the plumbing system is connected to a private disposal system.

**1603.2** No waste water from a permanent or temporary type swimming pool or wading pool shall drain any water on any premise so as to permit to run on adjoining premises.

**1604 Toilet Facilities.** - Sanitary toilet facilities, adequate and accessible, shall be provided for both sexes at all public and semi-public pools, as required by the Health Department and to meet the approval of the Chief Plumbing Inspector and Building Official.

**1605 Pool Equipment**

**1605.1** No public or private swimming or wading pool shall be constructed or placed on any public or private premise without adequate filtration,

chlorination, and/or disaffectation as may be required by the Health Department and to meet the approval of the Chief Plumbing Inspector.

**1605.2** Discharge from pools or appurtenances into the sanitary sewer shall be limited to 100 gallons per minute or the amount that may be discharged by gravity through a 4-inch pipe on a 2% grade.

**1606 Catch Basins, Deep Seal Traps**

**1606.1** Catch basins serving the discharge from swimming pools, filter backwash, and deck drains shall be constructed and installed as outlined in the Technical Code. The catch basin shall have sufficient cubic feet capacity to take care of water used for backwash from filters.

**1606.2** On private pools, deep seal traps as outlined in the Technical Code, may be installed in lieu of catch basins.

**1607 Waste and Deck Drain Piping.** - Waste and deck drain piping for pools shall comply with the provisions set forth in the Technical Code, as applicable to building sewers and underground piping within building.

**1607.1** For public, semi-public and wading pools, all deck drainage shall waste to the sanitary system through a catch basin, unless an alternative design is approved in advance by the Chief Plumbing Inspector.

**1608 Circulation and Vacuum Lines.** - Circulation lines and vacuum lines for public and semi-public pools shall comply with the provision set forth in the Technical Code, as applicable to materials underground.

**1609 Pool Water Supply.** - There shall be no direct connection between any domestic water supply line and any circulating pump, filter, water softener, or other apparatus or device that comes in contact with water in or around the pool. The domestic water supply to the surge tank or pool shall be above the extreme overflow level in such manner as to prevent water from the tank or pool from entering the domestic water supply or protected by a reduced pressure principal backflow preventer.

**1610 See 1002.11 for residential pool requirements**

## **Appendix A**

### **Plumbing Permit and Inspection Fee**

#### **P-1 Fees for Amending Permit**

**P-1.1** After a permit has been issued and an amendment or supplemental revision is applied for, the additional fee or service charge shall be as follows:

**P-1.2** For each and every amendment which involves additional work not originally applied for to complete the entire project, the addition fee shall be the normal fee for the work contemplated and shall be computed disregarding the valuation of the work previously permitted.

**P-1.3** For each and every amendment or supplement not involving additional work by square footage, volume or dollar value, the minimum fee normally required for such work shall apply even though the project dollar value or building volume may decrease. A minimum fee of \$20 is required.

#### **P-2 Work Commencing Before Permit Issuance**

In case any work requiring a permit is started prior to obtaining said permit, as a penalty for violating this Code, the total normal fee applicable shall be doubled. The payment of said fee shall not relieve any persons from fully complying with the requirements of this Code for performance or execution of the work, nor from other penalties prescribed by law. (Section 104.7.2)

#### **P-3 Schedule of Permit Fees**

**P-3.1** The fee for each permit shall start with a base fee of \$7.50 shall be computed as follows: for any installation or alteration of fixtures, including floor drains, deep seal traps, grease traps, roof drains, indirect waste openings, and other appurtenances connect to the plumbing system, will be \$7.50 for each fixture, but not less than the minimum fee.

**P-3.2** The fee for any alteration or replacement of more than 50% or over 20' of a house sewer or residential building sewer, or trap installation by other than a public agency, will be \$30. For Commercial sewers this fee will be based on the valuation of the work. The fee shall be charged at \$8.00 per \$1000 of valuation with a minimum fee of \$100.

**P-3.3** The fee for the original installation of any water service pipe shall be \$20 with the diameter of the service is 1 inch or less; \$30 when the diameter of the service is more than 1 inch, but not more than 2 inches; over 2" shall be charged at \$8 per \$1000 of valuation with a minimum of \$200.

#### **P-4 Minimum Permit Fee**

The minimum permit fee shall be \$15.

#### **P-5 Filing Application for Joint Board of Appeals**

Notice of Joint Board of Appeals under Section 108 shall be accompanied by a fee of \$100.

**P-6 Refunds**

Permit fees may be refunded if no work has commenced and a request for refunds is submitted to the Building Official in writing by the permittee within 6 months of the date of issuance. The permit is surrendered when a request for refund is submitted. The amount of the refund will be 2/3 of the permit fee, but in no case will the amount retained by the Office of Construction Code Enforcement be less than \$15.

**P-7 Reinspection Fee For Excessive Or Unessential Inspection Call**

**P-7.1** A \$50.00 reinspection fee shall be charged for the reinspection and rejection of the same infraction; and for every reinspection thereafter until the infraction is corrected.  
Note: Re-inspection fees shall be paid before the next inspection.

**P-7.2** Any person, firm or corporation aggrieved by the assessment for any reinspection fee may appeal to the Building Official for a review of the facts involved and a reduction or dismissal of said fees.

**P-8 Turnarounds**

Fees shall be as set forth in Section P-3.

**P-9 Sewer Connection or Replacement – Residential**

For each residential sewer connection or sewer replacement there is a fee of \$30 which must be added to the plumbing permit.

**P-10 Sewer Repair Fees. Residential**

For each residential sewer repair in which more than 50% or 20' of the sewer is replaced, this requires a \$30 Plumbing Permit Fee

**P-11 Commercial Sewer Installation, Replacement, or Repair**

For each commercial sewer installation, Replacement, or Repair the Plumbing Permit Fee will be charged based on the value of the work. The fee will be \$8 per \$1000 of valuation of the work with a minimum fee of \$100.

**NOTE: SEE PERMIT FEE SCHEDULE ON FOLLOWING PAGE**

## APPENDIX A (Continued)

### Appendix A Plumbing Permit Fee Schedule

#### Permit Issuance

1. For Issuing each permit.....\$4.00
2. For Issuing each supplemental permit.....\$4.00
3. Permit Amendment.....\$20.00

#### Unit Fee Schedule (In addition to items 1 and 2 above)

1. For each plumbing fixture or trap or set of fixtures on one trap  
(Including water & drainage piping).....\$7.50
2. For each sewer connection or sewer replacement (Residential).....\$30.00
3. For each sewer repair (more than 50%) or (more than 20') residential.....\$30.00
4. Commercial sewer fee -\$8.00 per \$1000 of valuation (minimum fee \$100) Fee
5. Repair or replacement of commercial sewer (per valuation- see #4) Fee
6. Roof Drains.....\$7.50
7. For each private sewage disposal system.....\$30.00
8. For each private sewage disposal system repair.....\$20.00
9. For each electric water heater.....\$7.50
10. For each individual waste pretreatment interceptor including its trap and vent,  
excepting kitchen type grease interceptors functioning as fixture trap.....\$7.50
11. Water service up to one inch size.....\$20.00
12. Water service over one inch but no more than 2 inches.....\$30.00
13. Commercial water service fee 2 ½ and larger (see below)  
\$8.00 per \$1000.00 of valuation with minimum of \$200.....Fee
14. for each backflow devise.....\$7.50

#### Re-Inspection fees

1. Second re-inspection trip.....\$50.00
2. Each trip thereafter.....\$50.00

Note there is a \$15 minimum permit fee. This does not include the \$4 issuing fee.



## Appendix C

### Gray Water Recycling and Rain Water Harvesting and Collection Systems

**Amend the “Note” at the beginning of the Appendix so that when amended it shall read as shown below, and add a new Section 301.3.1 in that Appendix that also amends the Code. Therefore, when the entire provision is amended the note and the two sections shall read as follows:**

**Note** – Section 301.3 of this code requires all plumbing fixtures that receive water or waste to discharge to the sanitary drainage system of the structure. In order to allow for the utilization of a gray water system, Section 301.3 should be revised to read as follows and Section 301.3.1 is added as a local amendment.

**301.3 Connections to drainage system.** All plumbing fixtures, drains, appurtenance and appliances used to receive or discharge liquid waste or sewage shall be directly connected to the sanitary drainage system of the building or premises, in accordance with the requirements of this code. This section shall not be construed to prevent indirect waste systems required by Chapter 8.

**Exception:** Bathtubs, showers, lavatories, clothes washer and laundry trays shall not be required to discharge to the sanitary drainage system when such fixtures discharge to an approved gray water system for flushing of water closets and urinals or for subsurface landscape irrigation.

**301.3.1 Rain Water Harvesting and Collection System.** This system may be used as a supplement source to the gray water system, and/or to provide water for either subsurface or above ground irrigation systems. The rain water harvesting and collection system, consisting of the storage tanks, associated piping and other support items, shall be governed by Appendix C and other applicable sections of this code and the Memphis and Shelby County Technical Code.

## **APPENDIX E**

**AMEND E201.as follows:**

**E201.1**        Change to 1" water service.

## **APPENDIX H CROSS CONNECTION, BACKFLOW AND BACK-SIPHONAGE**

### **SECTION H101 GENERAL**

#### **H101.1 Intent**

It is the intent of this Appendix to recognize that there are varying degrees of hazard to potable water within the water main and water supply systems, and it is the intent to apply the principle that the degree of protection should be commensurate with the degree of hazard.

#### **H101.2 Purpose**

The purpose of this Appendix is:

1. To protect the public water main against actual or potential cross connections, backflow and back-siphonage by isolating, within the premise or private property, contamination or pollution that has occurred or may occur because of some undiscovered or unauthorized cross connection on all premises or private properties.
2. To protect the water supply system within the premise or private property against actual or potential cross connections, backflow and back-siphonage by requiring such air gaps, vacuum breakers, backflow preventers, reduced pressure principle backflow preventers and special devices as required by this Appendix or other applicable regulations.
3. To eliminate cross connections, backflow and back-siphonage of any other source of water or process water used for any purpose whatsoever which may jeopardize the safety of the water supply or which may endanger the health and welfare of the general public.
4. To establish a cross connection, backflow and back-siphonage control program.

#### **H101.3 Control**

Cross connection, backflow and back-siphonage control requires cooperation between water purveyors, the public health officer, the plumbing official and the consumer. The responsibilities and duties of each shall be as set forth in this Appendix and other applicable regulations. Where circumstances do not make feasible or necessary the establishment of a control committee, or the participation in enforcement by the public health officer or the water purveyor, the local governing body may provide the plumbing official with other means to administer and enforce the control program.

### **SECTION H102 RESPONSIBILITIES**

#### **H102.1 Enforcement**

The plumbing official shall enforce the provisions of this code so as to insure the potability of the consumer's water supply, from the point of entrance of the public water supply to the extremities of the consumer's water system. The plumbing official has primary enforcing responsibility of new installations, alterations or repairs of water supply systems. He shall provide the health officer and the water purveyor with the assistance required to enforce the provisions of this Appendix on existing water supply systems.

### **H102.2 Water Purveyor**

The water purveyor is primarily responsible for the prevention of contamination and pollution of the public water supply and includes adequate treatment facilities and water mains, and ends at the point of entrance to the consumer's water system, provided adequate backflow and back-siphonage protection is maintained on all water supply systems directly connected to the water purveyor's public system. The water purveyor has secondary supervisory responsibility to the plumbing official for new installations, alterations, or repairs of water supply systems and has secondary supervisory responsibility to the health officer for existing water supply systems.

### **H102.3 Health Officer**

The health officer, when administrative head water quality control, is responsible for supervising the prevention of contamination and pollution of the public water main, all water supply systems and all water sources. Such responsibility extends from the point of origin of the public water supply to and including all extremities of the consumer's supply and its actual use. The health officer has prime supervisory responsibility for administration and enforcement of those portions of the Cross Connection, Backflow and Back-Siphonage Control Program applicable to existing water supply systems and water sources. The health officer has secondary supervisory responsibility to the water purveyor for the public water system.

### **H102.4 Consumer**

The consumer has the prime responsibility of preventing contaminants and pollutants from entering his water supply system, and from entering the public water main or water source from his water supply system. The consumer shall protect his water supply system against actual or potential cross connection, backflow or back-siphonage, as required by this Appendix, and other applicable regulations. He shall assure that all protective devices are tested and maintained in the working condition required. He shall assure the necessary plumbing permits are obtained for new water supply system installations, and for alterations or repair to existing systems, as required by this Appendix.

### **H102.5 Control Board**

A Cross Connection Control Board, when established, shall assist the plumbing official, the water purveyor and the health officer in the enforcement of this Appendix and other applicable regulations. Complaints of any citizen shall be brought before the Board for review and recommendation to the local governing body having jurisdiction. The Board shall also serve as an appeals Board in the manner hereinafter set forth.

## **SECTION H103 DEFINITIONS**

Definitions contained in Chapter 2 shall also apply, except where the following special definitions shall apply:

**BACK-SIPHONAGE BACKFLOW** – a reversal of the normal direction of flow in the pipeline due to a negative pressure (vacuum) being created in the supply line with the backflow source subject to atmospheric pressure.

**BACKFLOW PREVENTER** – a device or an assembly to prevent backflow. As there are two conditions of backflow, the backflow preventer should be specified by the conditions and degree

of hazard and the backflow preventer should also be specified by the type of backflow it is designed to prevent. (See Back Pressure Backflow Preventer, Backflow Preventer-Reduced Pressure Type, Back-Siphonage Backflow Preventer).

**BACK PRESSURE BACKFLOW PREVENTER** – a device to prevent backflow due to a general condition in which the pressure in the system becomes greater than the supply pressure, the system being above atmospheric pressure.

**BACKFLOW PREVENTER, REDUCED PRESSURE TYPE** –an assembly having two cutoffs, four test cocks, two check valves force-loaded, or biased, to a normally closed position, a reduced pressure zone between the check valves in which the pressure is normally lower than the supply pressure, and a relief or vent valve force loaded to a normally closed position located in the zone to automatically open a passage between the zone and the atmosphere should the zone pressure, for any reason, tend to equalize with or exceed the supply pressure.

**BACK-SIPHONAGE BACKFLOW PREVENTER, GENERAL** – a device or combination of devices for preventing back-siphonage in a water supply line.

**CHECK VALVES ASSEMBLY DUAL** – a combination of spring and weight loaded check valves with resilient discs for the intended purpose of preventing back pressure backflow in a water supply line. Some assemblies may include a “vent” to admit atmospheric air into the device.

**CONSUMER** – any person, firm or corporation using or receiving water from the authority’s water system.

**CONTAMINANTS** – any foreign materials solid or liquid, not common to the potable water supply and which make it unfit or undesirable for human or animal consumption.

**CONTAMINATION** – the admission of contaminants into the potable water supply.

**CROSS CONNECTION** – any connection by means of which contaminants of any kind can be caused to enter the potable water supply system.

**DOUBLE-CHECK VALVE ASSEMBLY** an assembly having two cutoffs, four test cocks, two check valves force-loaded, or biased, to a normally closed position.

**LOCAL GOVERNING BODY** – a city, county, state, state agency or other political government subdivision or entity authorized to administer and enforce the provisions of the plumbing code as adopted or amended.

**WATER PURVEYOR** – the owner or operator of the public potable water system supplying an approved water supply to the public. As used herein, the terms “water purveyor” and “municipal water authority” may be used synonymously.

## **SECTION H104 REGULATIONS**

### **H104.1 Protection against contamination**

**H104.1.1** No water service connections to any premises shall be installed or maintained unless the potable water and water supply are protected against actual or potential contamination of pollution in the manner required.

**H104.1.2** In the event of contamination or pollution of a potable water system, the consumer shall notify immediately the plumbing official, the health officer or the water purveyor in order that appropriate measures may be taken to overcome the contamination or pollution.

## **H104.2 Duties and Inspections**

**H104.2.1** The plumbing official, the health officer, the water purveyor, or their authorized representative shall have the right to enter any building, structure or premises to perform any duty imposed upon him by the code.

**H104.2.2** Nothing herein shall relieve the consumer of the responsibility for conducting, or causing to be conducted, periodic surveys of water use practices on his premises to determine whether there are actual or potential cross connections in the consumer's water system through which contaminants or pollutants could flow back into a public water system or a potable consumer's water system.

**H104.2.3** It shall be the duty of the plumbing official, the health officer and the water purveyor to cause inspections to be made of all properties containing potable water systems and where cross connection, backflow and back-siphonage is deemed possible. The frequency of inspections and reinspections based on potential health hazards involved shall be as established by the Cross Connection, Backflow and Back-Siphonage Control Board. On request the consumer shall furnish to the inspection agency any pertinent information regarding the water supply system on such property.

**H104.2.4** It shall be the duty of the Cross Connection, Backflow and Back-Siphonage Control Board to establish the regulations required to prevent contamination and pollution of potable water. These regulations shall be uniform, taking into account the varying degrees of hazards for various premises, and shall properly utilize backflow prevention principles, devices, assemblies, tests, maintenance and repair, as contained in ANSI/ASSE 1001, ANSI/ASSE 1011, ANSI/ASSE 1012, ASSE 1013 and ASSE 1015, or as contained in AWWA C506.

**H104.2.5** The plumbing official, the health officer, the water purveyor or their authorized representative shall notify the consumer of the preventive actions required. The consumer has the right of appeal to the Board.

**H104.2.6** The water service shall be discontinued after reasonable notice to the consumer if a violation of this Appendix exists on the premises, and such other precautionary measures shall be taken as are deemed necessary to eliminate any danger to the potable water supply. The water service shall not be restored until the danger has been eliminated and comes into compliance with the provisions of this Appendix.

**H104.2.7** The consumer shall keep records on his testing, maintenance and repair activities and shall make these records available upon request.

## **SECTION H105 ESTABLISHMENT OF THE CONTROL BOARD**

### **H105.1 Board Composition**

**H105.1.1** When established, the Memphis and Shelby County Cross Connection Board, hereinafter referred to as "the Board," shall be composed of the following: one representative of the water purveyor, one member of the plumbing inspection department, one member of the building and housing department, one member from the health department, one attorney licensed to practice law in Tennessee, one representative of industry at large, one citizen and any other appropriate representative which may be appointed. The term of office for these members shall be as established under the applicable procedure of the government authority.

**H105.1.2** The Board shall select annually a chairman from among its members. The Board shall hold at least four regular meetings each year and such additional meetings as the chairman deems necessary. All hearings shall be held before not less than a majority of the Board.

## **H105.2 Appeals**

**H105.2.1** In addition to other duties set forth in this Appendix, the Board is hereby vested with the authority to decide appeals from any decision, ruling or determinations of the inspection agency.

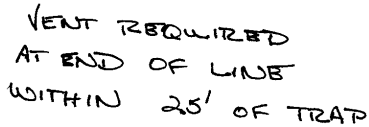
**H105.2.2** Any person seeking a variance from the provisions of this Appendix or any person taking exception to and who is uniquely affected by any decision, ruling, requirement, rule, regulations, or order of the inspection agency may take an appeal to the Board as established by this section. Such appeals shall be made within 15 days after receiving notice of such decision, ruling, requirement, rule, regulation or order by filing a written notice of appeal directly to the Board specifying the ground thereof and the relief requested. Such an appeal shall act as a stay of the decision, ruling, requirement, rule, regulation or order in question until the Board has taken final action on the appeal, except when the inspection agency has deemed that a high hazard risk is involved. The Board, not less than 30 days after the date of filing an appeal, shall set a date for the hearing and shall give notice thereof by mail to the interested parties.

## **H105.3 Hearings**

Hearings before the Board shall be conducted in the following manner:

1. The chairman of the Board shall act as the hearing examiner to conduct such hearings.
2. Any person making an appeal who is uniquely affected by the action of the inspection agency may appear in person or by agent or attorney and present evidence, both written and oral, pertinent to the questions and issues involved and may examine and cross-examine witnesses.
3. All testimony shall be under oath and recorded. The Board is authorized to have all the testimony transcribed and a transcript of such testimony, if transcribed, shall be made available to the respondents or any party to the hearing upon payment of the normal fee, which shall not exceed the cost of transcribing such testimony.
4. After due consideration of the written and oral statements, the testimony and arguments submitted at the hearing upon such complaint, or upon default in appearance of the respondent on the return date specified in the formal notice of complaint, the Board shall issue and enter such final order or make such final determination as it shall deem appropriate, and shall immediately notify the respondent thereof, in writing, by certified mail. Such order or determination shall be approved by at least a majority of members of the Board. The chairman shall vote only in cases of ties.
5. Upon failure of the Board to enter a final order or determination within 60 days after the final argument of any such hearing, the respondent shall be entitled to treat for all purposes such failure to act as a finding favorable to the respondent.
6. Any person aggrieved by any final order or determination of the Board hereunder may seek judicial review thereof by common law writ or certiorari. No judicial review shall be available until and after all administrative remedies have been exhausted.

EXAMPLE ONLY:



ALL TRAPS BELOW ROOF  
TYP.

2 FT.  
MAX.

LATERAL VENT REQUIRED WHEN  
LATERAL VENT EXCEEDS 25' FROM  
MAIN VENTED LINE (TYPICAL OF  
ALL BRANCHES)

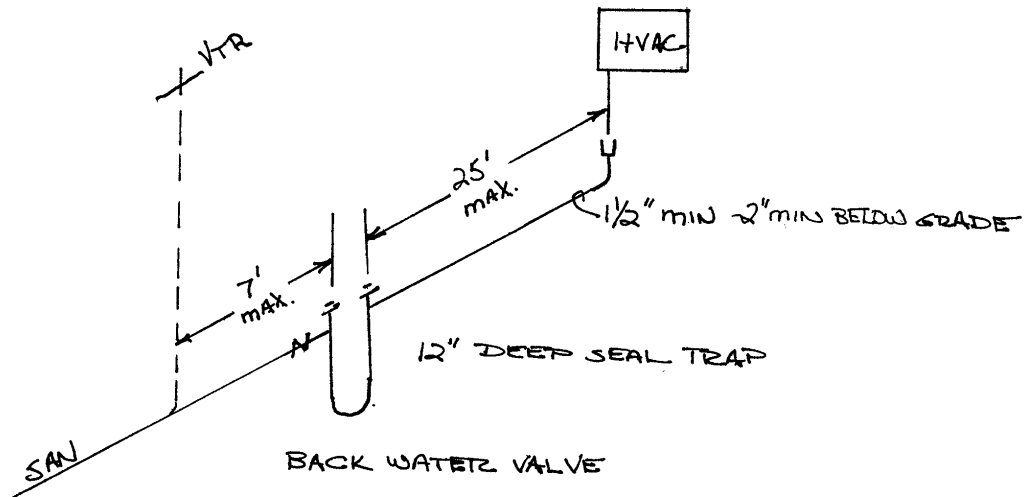
2" MIN.  
UNDERGR

F.D.

SANITARY  
SIZED AS PER  
CODE



USED ONLY IN CASES  
WHERE ACTIVE TRAP  
CANNOT BE REACHED.



APPROVED RESIDENTIAL  
CONDENSATE METHOD

LEAVE OPEN ABOVE  
FLOOD LEVEL AT  
UNIT

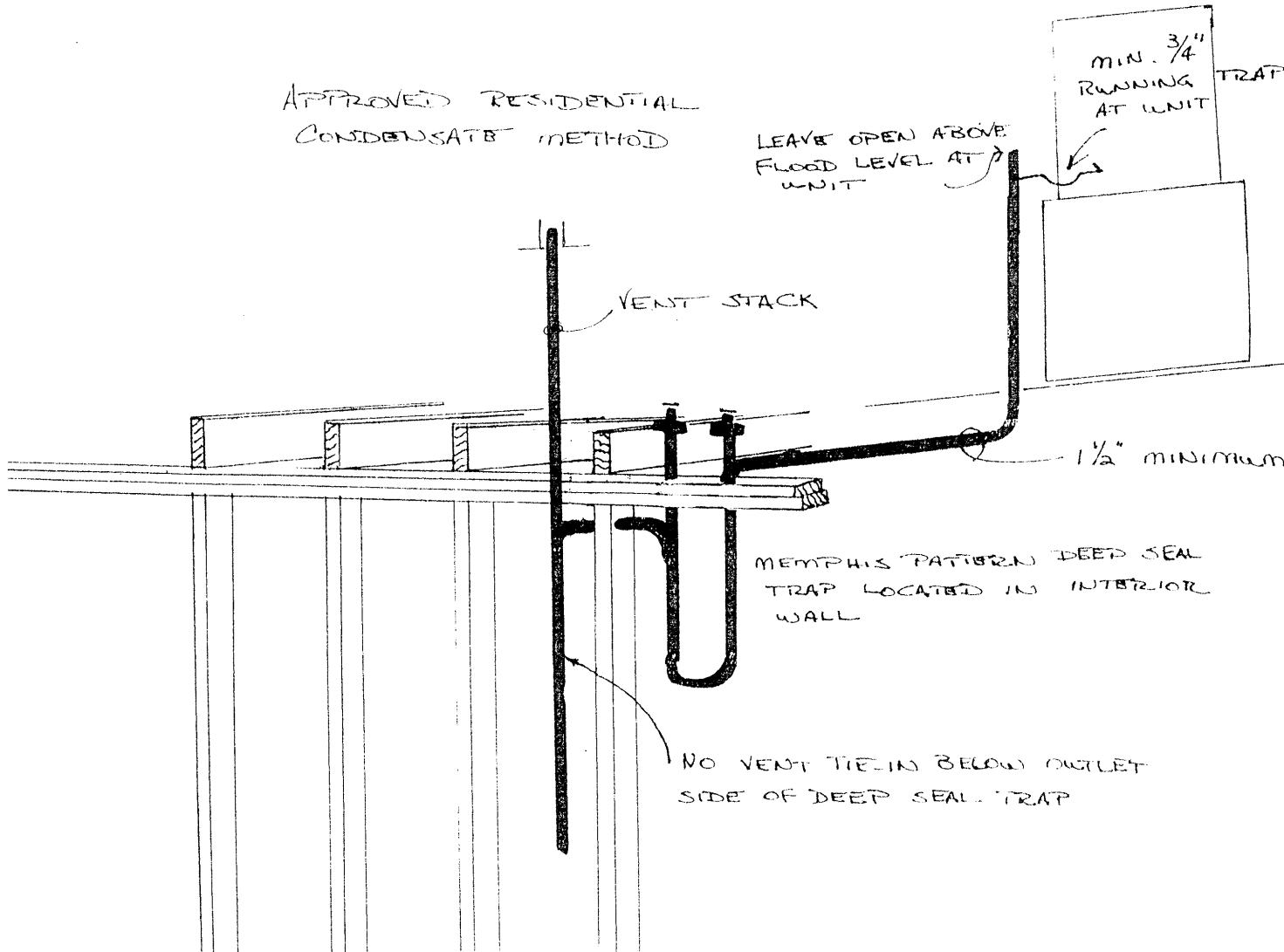
MIN. 3/4"  
RUNNING TRAP  
AT UNIT

VENT STACK

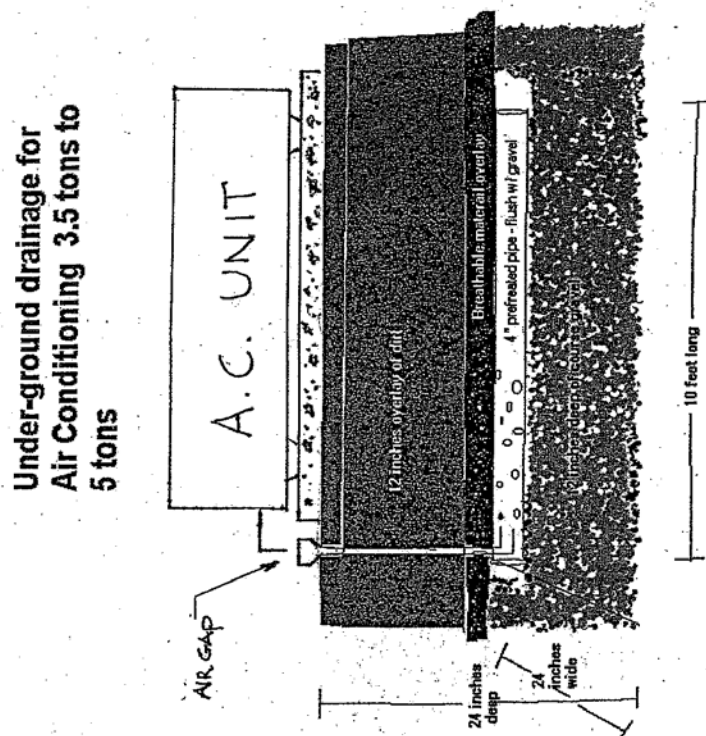
1/2" MINIMUM

MEMPHIS PATTERN DEEP SEAL  
TRAP LOCATED IN INTERIOR  
WALL

NO VENT TIE-IN BELOW OUTLET  
SIDE OF DEEP SEAL TRAP



## Alternate Condensate Disposal



NOTE: ALL WORK TO BE INSPECTED BEFORE BACKFILLING

CONDENSATE PROVISION WHEN  
NO SANITARY SEWER IS AVAILABLE

— PERMIT REQ'D. BY WHOMEVER DOES WORK —

1-3 TONS — 2' X 2' X 2' PIT  
W/ GRAVEL & FILTER CLOTH

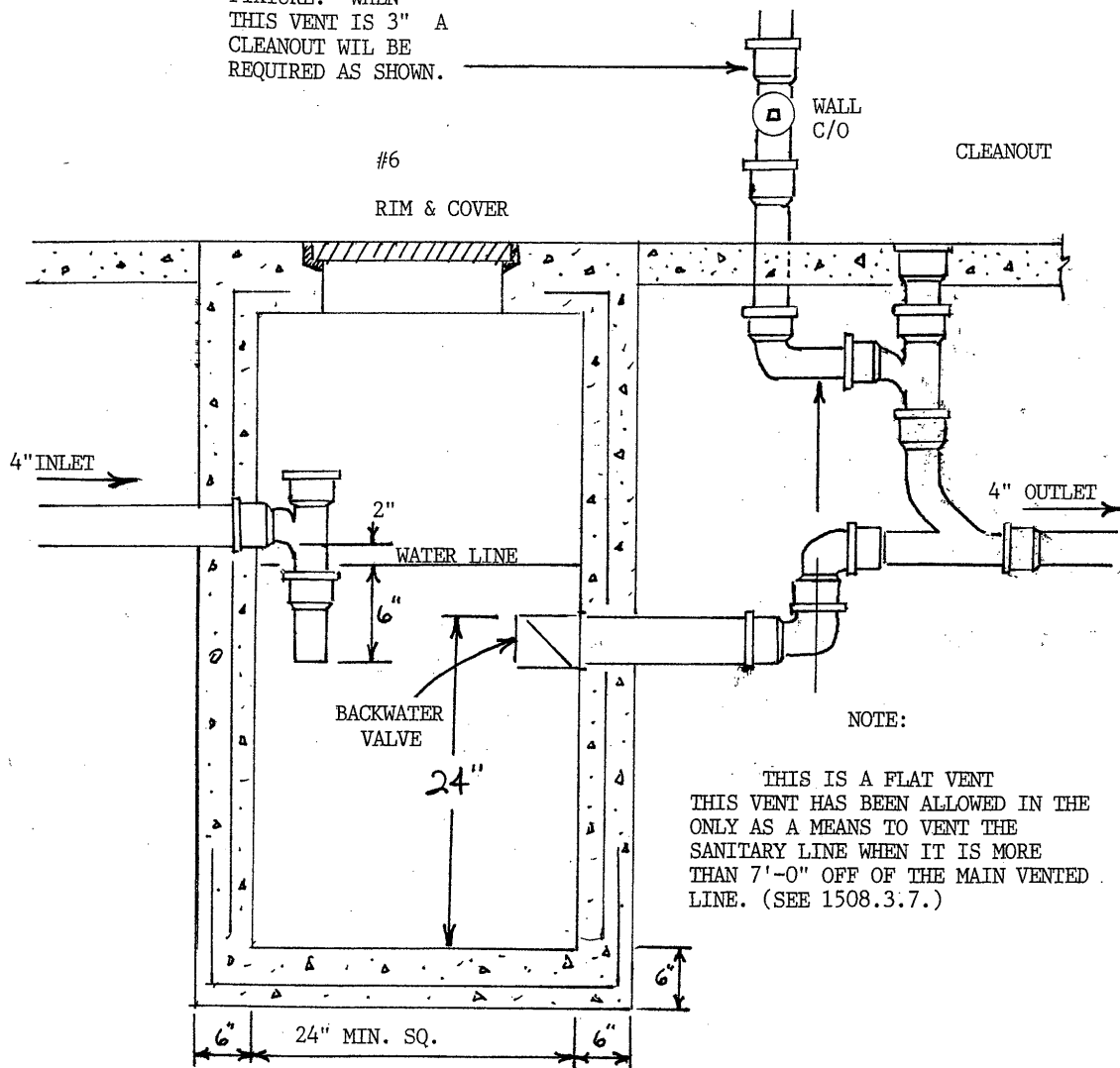
3 1/2 - 5 TONS — 2' X 2' X 10'

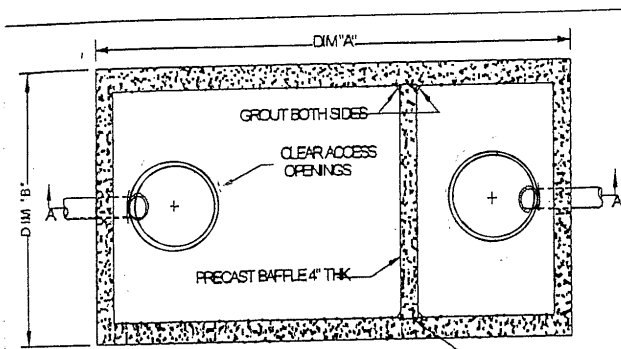
OVER 5 TONS — ENGINEERED

Fig.314.2.7



WHEN THIS VENT IS  
2" IN SIZE IT  
MUST BE WASHED  
WITH AN APPROVED  
FIXTURE. WHEN  
THIS VENT IS 3" A  
CLEANOUT WIL BE  
REQUIRED AS SHOWN.



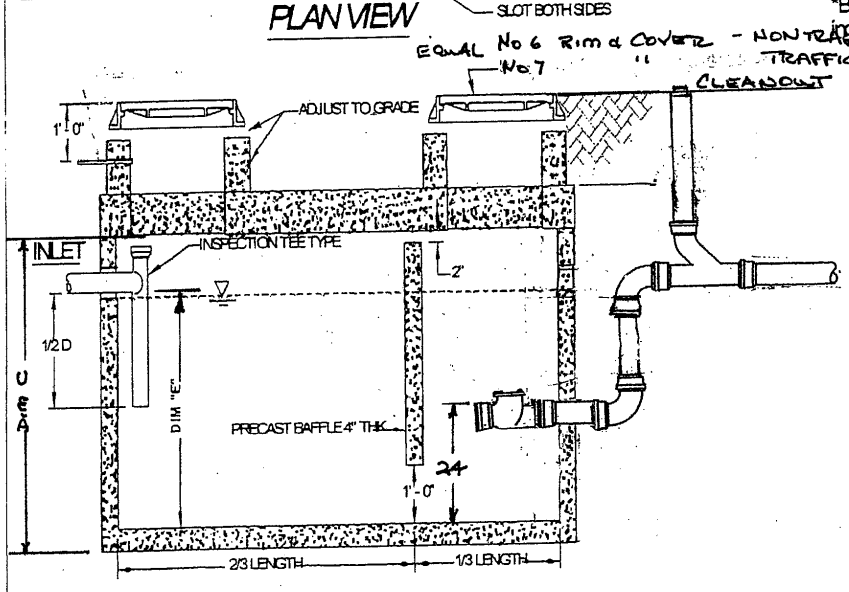


**PLAN VIEW**

**SIZING CHART**

GALLON CAPACITY	DIM 'A'	DIM 'B'	DIM 'C'	DIM 'D'	DIM 'E'
600	7'-0"	4'-8"	7'-0"	3'-8"	3'-2"
750	7'-0"	4'-8"	7'-0"	4'-3"	3'-11"
1000	7'-0"	5'-0"	7'-2"	4'-2"	3'-10"
1250	8'-0"	5'-0"	7'-2"	5'-2"	4'-10"
1500	9'-0"	5'-3"	7'-2"	4'-4"	4'-0"
1750	11'-2"	5'-8"	7'-2"	4'-11"	4'-7"
2000	11'-2"	6'-3"	8'-0"	4'-7"	3'-10"
2500	12'-8"	6'-8"	8'-0"	5'-8"	4'-9"
2750	12'-8"	6'-8"	8'-0"	6'-0"	5'-3"
3000	15'-7"	9'-7"	8'-6.5"	8'-0"	3'-9"
4000	15'-7"	9'-7"	8'-6.5"	8'-3"	5'-0"
5000	19'-11"	9'-11"	8'-11"	8'-2"	4'-4"
8000	19'-11"	9'-11"	10'-9"	7'-2"	5'-9"

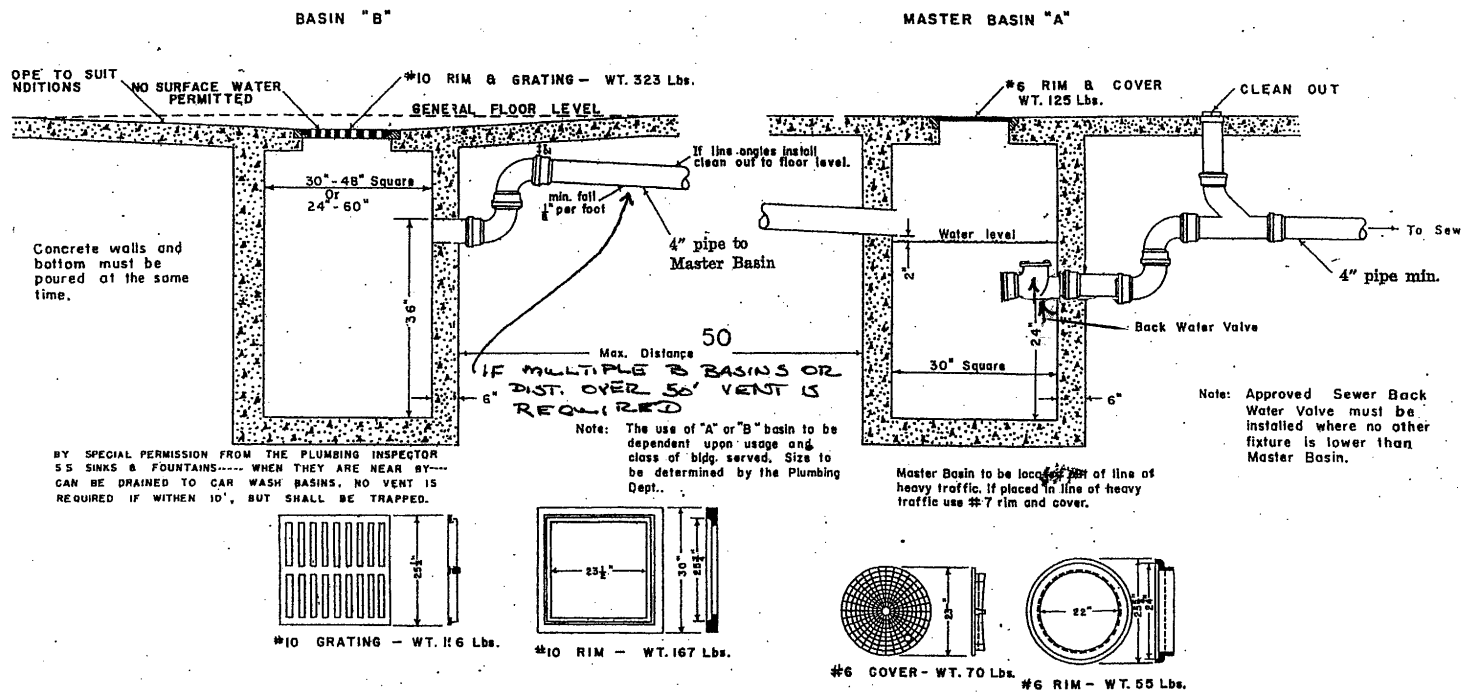
\*Bottom slab thickness increases with trap capacity

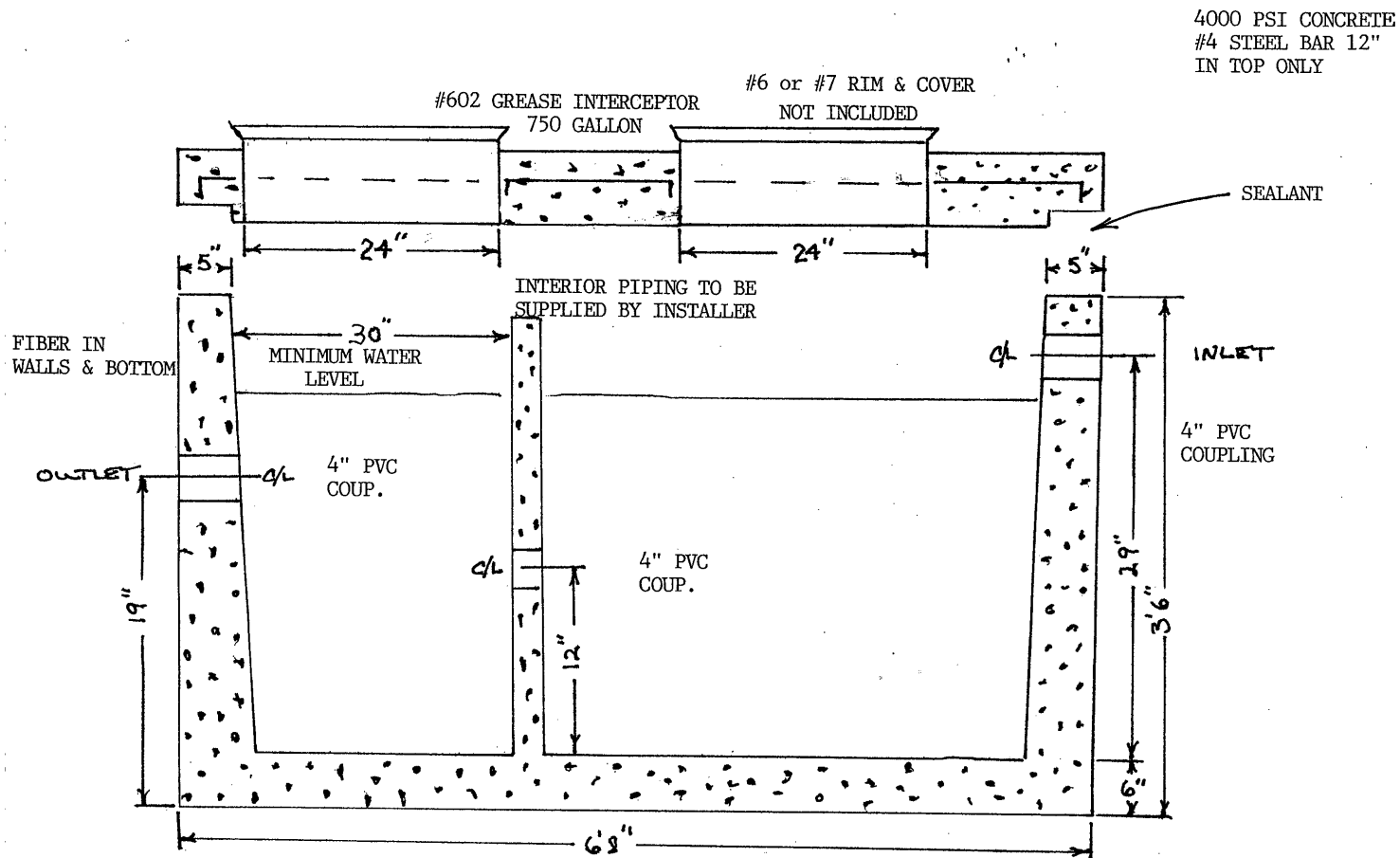


EQUAL No 6 Rim & Cover - NON TRAFFIC

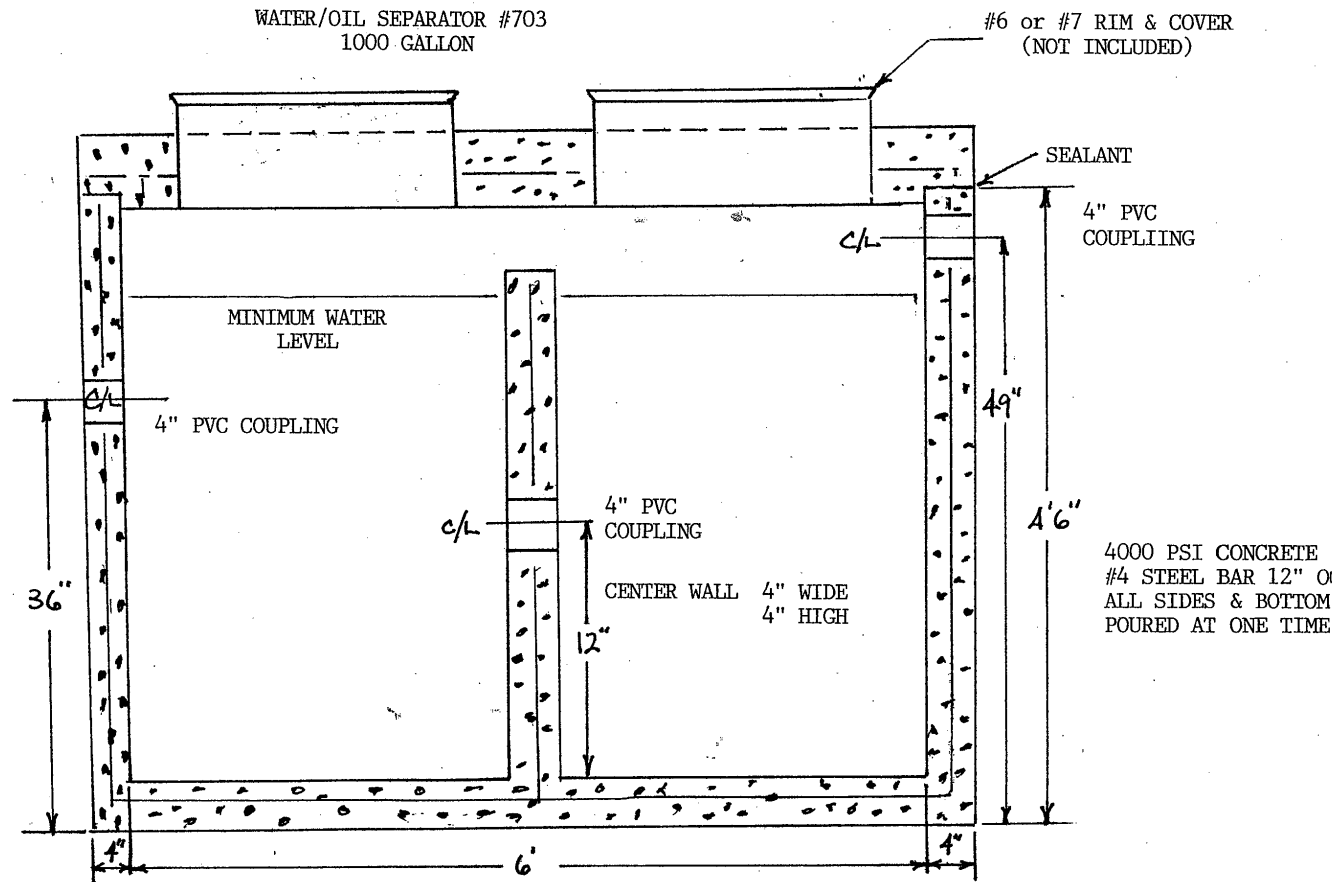
CLEANOUT

# CAR WASH BASINS







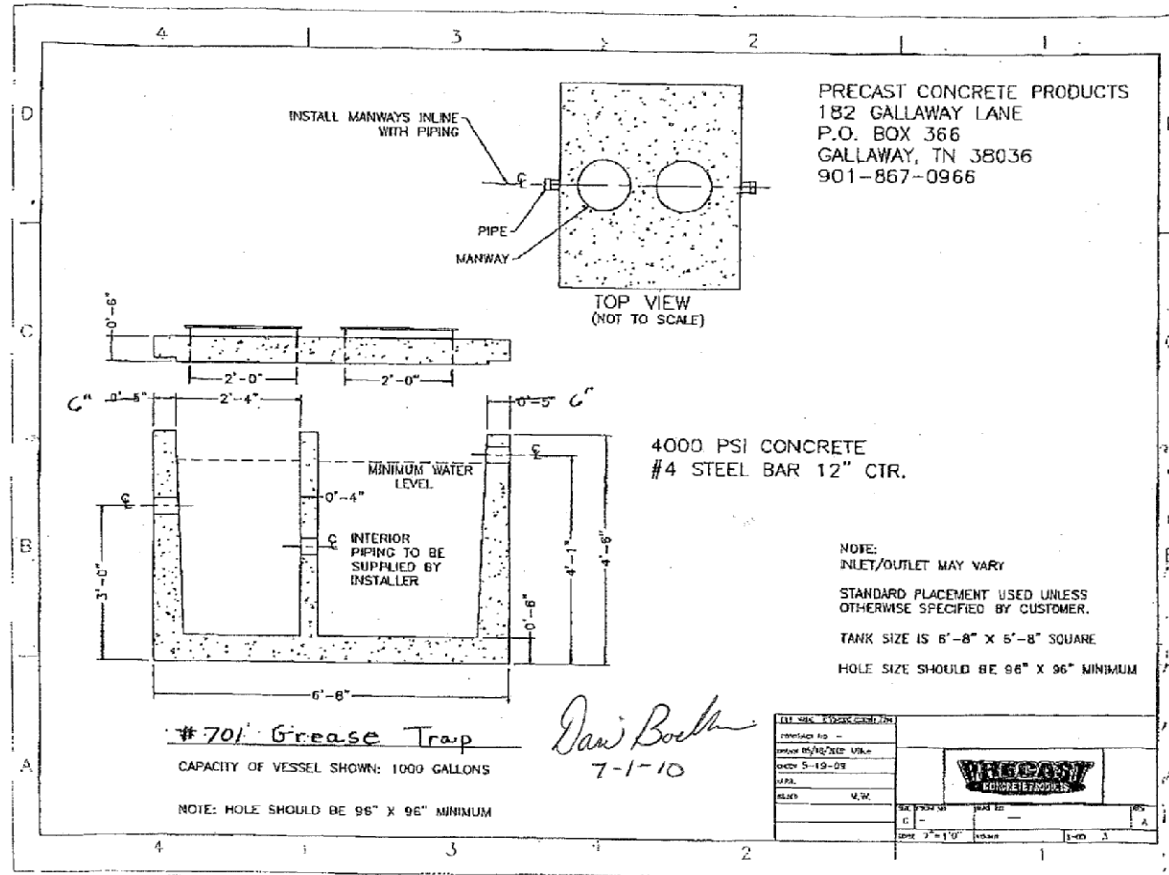


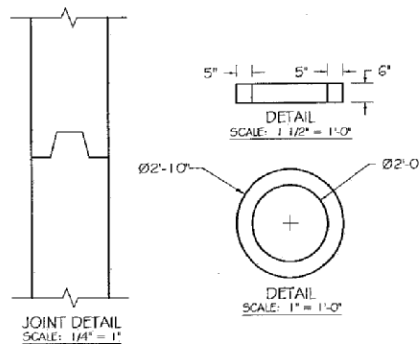
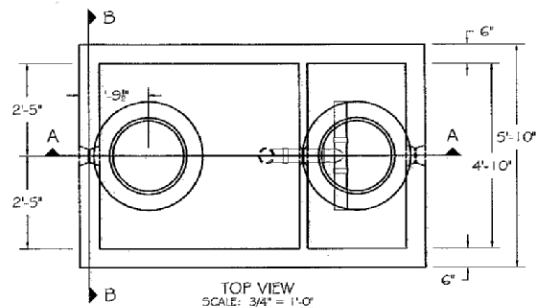
NOTE: STANDARD INLET/OUTLET MEASUREMENTS ARE USED  
UNLESS OTHERWISE SPECIFIED BY CUSTOMER

# Grease Interceptors

Jun. 23 2010 11:22AM P2

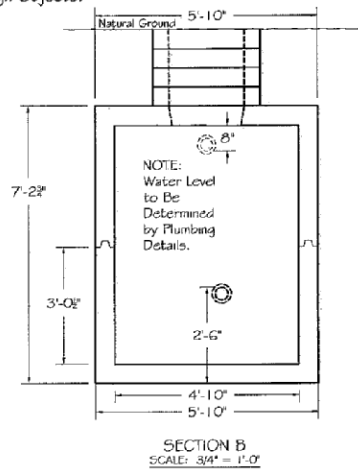
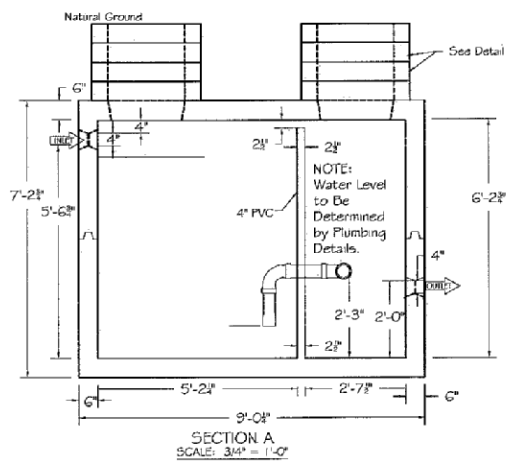
FROM : PRECAST CONCRETE PRODUCTS INC. FAX NO. : 9018670966





NOTES:

All Concrete Is To Be A Minimum Of 4500 psi, With A Maximum Aggregate Size Of  $\frac{3}{4}$ ".  
All Inspection Holes and Tops Are To Be Sealed With An Asphalt Sealer.  
The Subgrade Is To Be Level Within  $\pm \frac{1}{2}$ " And Free Of Foreign Objects.



GI 1500 6in Wall Shelby City

LEE'S PRECAST CONCRETE, INC.

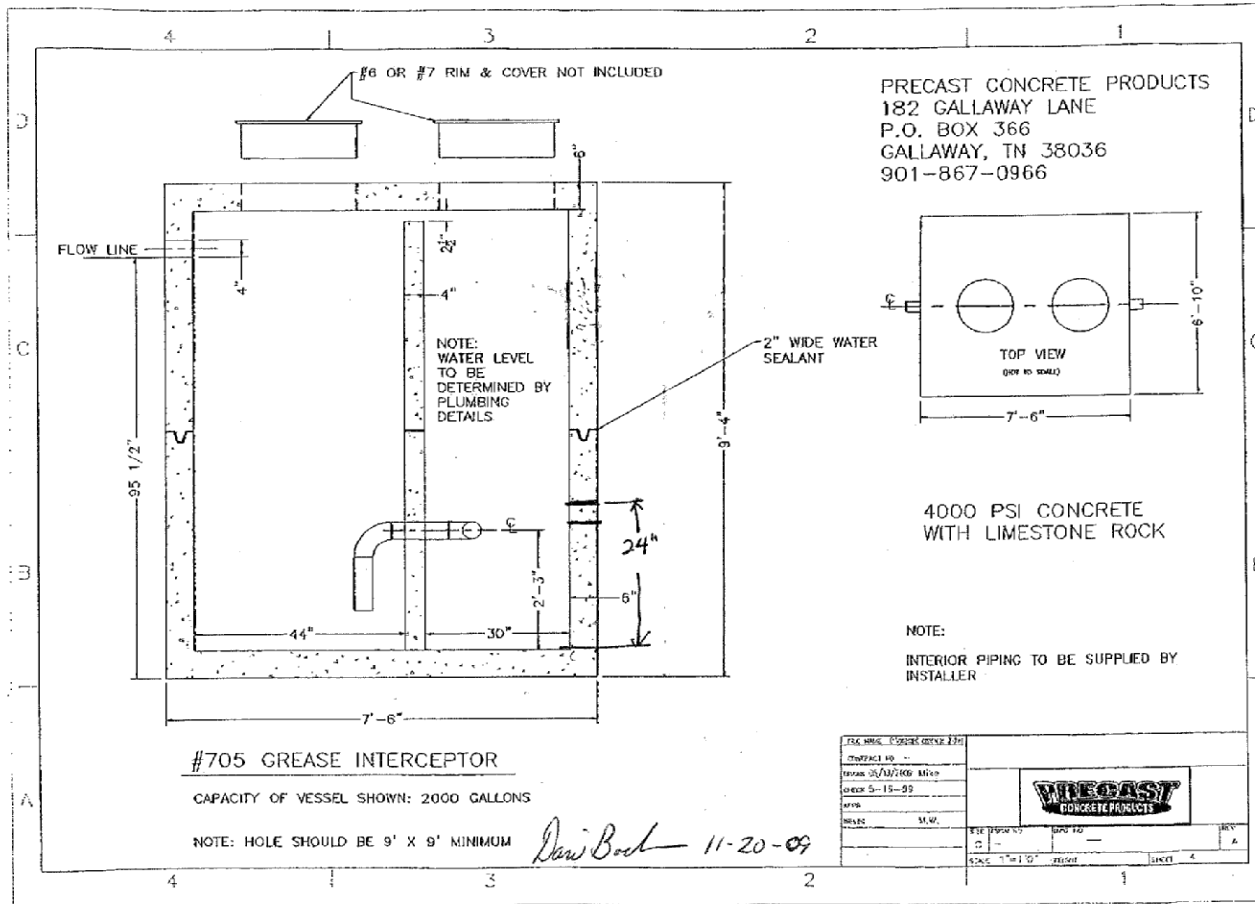
20578 Ezyot Road, Abbeville, MS 39730

Phone: (662) 388-5935 Fax: (662) 388-9783

SHEET NO.

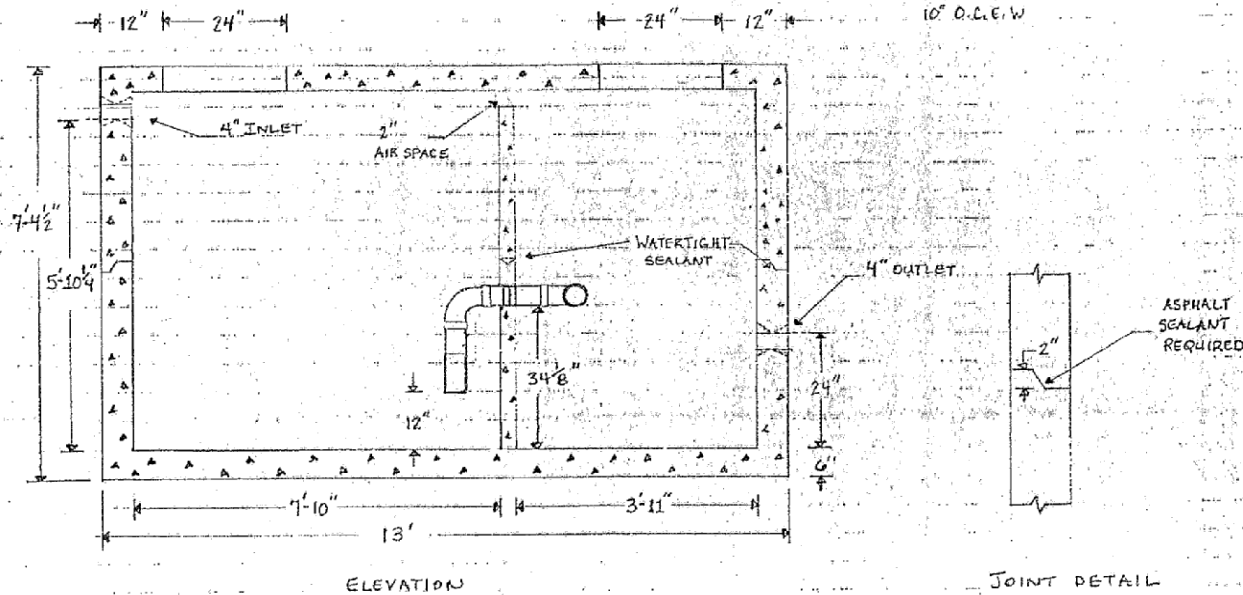
2

OF 5



NOTES:

1. ALL CONCRETE IS TO BE MINIMUM OF 4,000 PSI.
2. TOP REINFORCED WITH #5 GRADE 60 10' O.C.E.W.



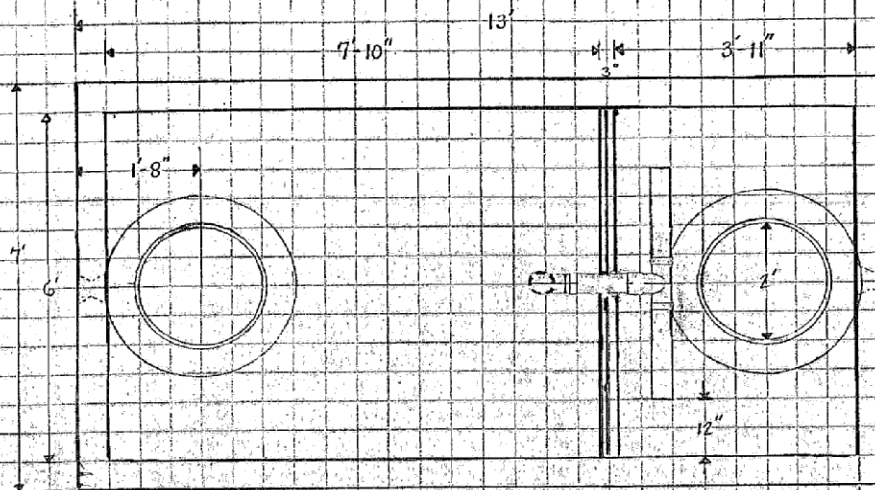
NOTE: NOT TO SCALE.

SHEET NO.  
1 of 2

APPROVED BY: Robert G. Craven 12/4/08  
COUNTY: \_\_\_\_\_

6" WALL MID-SEAM 3,000  
GAL. GREASE INTERCEPTOR

LEE'S PRECAST CONCRETE, INC.  
20578 EGYPT RD, ABERDEEN, MS 39730  
PH: 662-369-8935, FAX: 662-369-9183



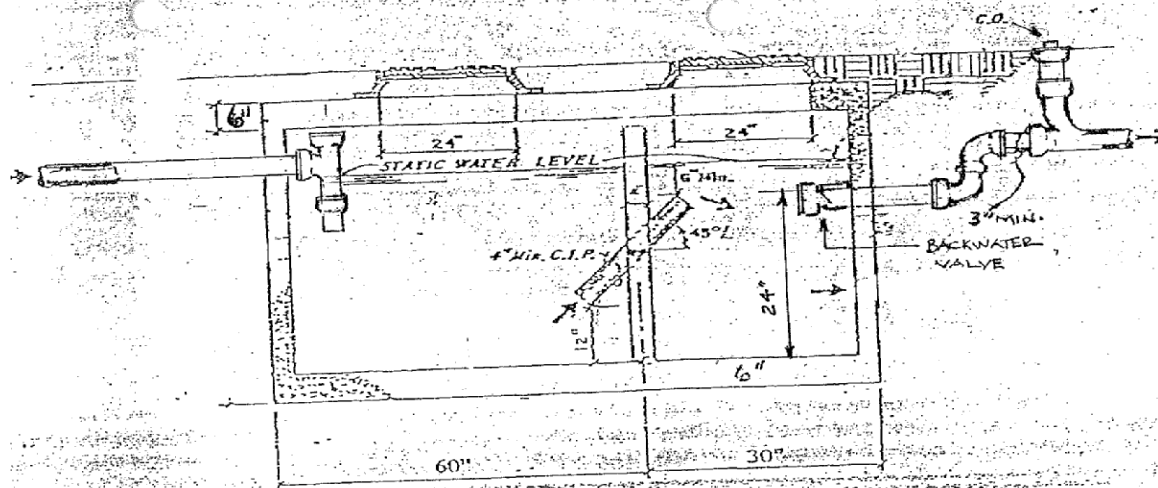
PLAN

SCALE: 1/4" = 1'-0"

SHEET NO.  
2 of 2

6" WALL AND-SEAM 3,000  
GAL. GREASE INTERCEPTOR

LEE'S PRECAST CONCRETE, INC.  
28578 EGYPT RD, ABERDEEN, MS 39730  
PH: 662-369-8935, FAX: 662-369-9783



# SPECIFICATIONS

CONCRETE - 4500 PSI @ 28 DAYS

REINFORCEMENT -

TANK: TOP & BOTTOM

6X6X10 WIRE MESH

#4 STEEL REINFORCING BAR ON 20" CENTERS

TANK SIDES: #4 REINFORCING BAR ON 20" CENTERS

#12 TWISTED CABLE

CAST IRON FRAME & LID - VULCAN V-1348 HEAVY DUTY  
260LBS.



THE Southern Co. INC.

AIR & THICK WASTE SYSTEMS  
AIR & LIQUID TREATING EQUIPMENT  
INDUSTRIAL EQUIPMENT

JERRY DOWD  
VICE PRESIDENT

3201 CYPRESS  
FORT LEE, N.J. 07024

SCALE		DATE
11		REVISED
1000 GALLON GREASE/OIL SEPARATOR		HEP
DATE	DRAWING NUMBER	

MADE IN

